ATP 3-90.1

Armor and Mechanized Infantry Company Team

JANUARY 2016

This publication supersedes FM 3-90.1, 9 December 2002.

Headquarters, Department of the Army

*Army Techniques Publication
No. 3-90.1

Headquarters
Department of the Army
Washington, DC, 27 January 2016

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Army techniques publication (ATP) 3-90.1 provides techniques, for the employment of Armor and mechanized Infantry company teams within combined arms battalions (CABs) in the Armored brigade combat team (ABCT). It provides the framework and technical employment principles for Armor and rifle company teams within CAB in the ABCT.

This ATP provides doctrinal guidance for commanders, staff, and leaders who plan, prepare, execute, and assess the operations of Armor and mechanized Infantry company teams. Specifically it is directed toward the company commander, executive officer (XO), first sergeant (1SG), platoon leader (PL), platoon sergeant (PSG), fire support officer (FSO), master gunner, supply sergeant, signal support specialist, emergency care sergeant, field maintenance team (FMT) chief, and all supporting units.

Commanders, staffs, and subordinates ensure their decisions and actions follow applicable United States (U.S.), international, and, in some cases, host-nation laws and regulations. Commanders at all levels ensure their Soldiers operate according to the law of war and rules of engagement (ROE). (Refer to Field Manual (FM) 27-10 for more information).

This publication serves as an authoritative reference for United States Army Training and Doctrine Command personnel who develop doctrine material and force structure, institutional and unit training, and company team standard operating procedures (SOPs). It is a guide for Armor and mechanized Infantry companies to develop SOPs.

ATP 3-90.1 uses joint terms where applicable. Selected joint and Army terms and definitions appear in both the glossary and the text. Terms for which ATP 3-90.1 is the proponent publication (the authority) are italicized in the text and are marked with an asterisk (*) in the glossary. Terms and definitions for which ATP 3-90.1 is the proponent publications are boldfaced in the text. For other definitions shown in the text, the term is italicized and the number of the proponent publication follows the definition. The techniques contained in this ATP are to be used as a guide and are not to be considered prescriptive. This ATP includes discussions of doctrine that are applicable to all Armor and rifle companies.

This publication applies to the Active Army, the Army National Guard, the Army National Guard of the United States, and the United States Army Reserve unless otherwise stated.

The proponent for this publication is the United States Army Training and Doctrine Command. The preparing agency is the U.S. Army Maneuver Center of Excellence. Send comments and recommendations by—U.S. mail, e-mail, fax, or telephone—following DA Form 2028 (*Recommended Changes to Publications and Blank Forms*). Point of contact information follows:

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Unless otherwise stated in this publication, masculine nouns and pronouns refer to both men and women.

INTRODUCTION

ATP 3-90.1 has been updated and provided as an ATP in accordance with 2015 Doctrine Strategy. In addition to doctrine changes, a significant effort has been made to eliminate redundancies with parent doctrinal manuals (for example ADRP 3-07). The end results are a reduction of chapters, from 11 to 8.

Chapter 1 discusses the role of the Armor and mechanized Infantry company team. It discusses Armor and mechanized Infantry company team operations It also combines content from previous Chapters 2 and 3 to include discussion on the operational areas, the role of the Armor and Mechanized Infantry Company Team, the duties and responsibilities for key personnel and the operations process.

Chapter 2 discusses basics of the offense, common offensive planning considerations, actions on contact, movement to contact (MTC), and attack

Chapters 3 discusses basics of the defense, common defensive planning considerations, defensive techniques, engagement area (EA) development, and transitions.

Chapter 4 discusses company support for stability tasks, company stability tasks, common stability planning considerations, inform and military transition teams.

Chapter 5 establishes techniques and procedures that the company team can apply to these specialized missions (such as, linkup, passage of lines, relief in place, battle handover, assembly area operations)..

Chapter 6 discusses principles of direct fire control, the fire control process, direct fire planning, and direct fire control.

Chapter 7 focuses on those elements with which the company team is most likely to work: fires, aviation, protection, and intelligence.

Chapter 8 discusses the provision of the logistics, personnel services, and Army health protection necessary to maintain operations until mission accomplishment.

Chapter 1
Organization and Capabilities

Because of its mix of weaponry, personnel, and supporting elements, the company team is one of the most versatile combat assets on the modern battlefield. This chapter discusses the role, organization, and operations of the Armor and mechanized Infantry company team. It also describes the duties and responsibilities of key members of the company team.

SECTION I – ROLE OF THE ARMOR AND MECHANIZED INFANTRY COMPANY TEAM

1-1. The role of the Armor and mechanized Infantry company team is to fight and win engagements on any battlefield in any operational environment (OE). The CAB commander may task organize the company team to execute close combat tactical missions as part of ABCT operations. Company teams are optimized to conduct offensive, defensive and stability tasks. Company teams are capable of deploying worldwide and conducting operations across the range of military operations

TASK ORGANIZATION

1-2. The company team is task-organized with mechanized Infantry and tank platoons based upon missions. Its effectiveness increases through the synergy of combined arms including tanks, Bradley fighting vehicles (BFV), Infantry, engineers, and support elements. Typically, an Armor company team comprises two tank platoons with one mechanized Infantry platoon. A mechanized Infantry company team comprises two mechanized Infantry platoons with one tank platoon. Effective application of the company team as a combined arms force can capitalize on the strengths of the team's elements while minimizing their respective limitations.

MECHANIZED INFANTRY COMPANY

1-3. The mechanized Infantry company consists of a headquarters and three BFV platoons that are organized, equipped, and trained to fight with organic assets or as a task-organized company team. The headquarters element comprises two BFVs, under the command of the commander (CDR) and XO. (See figure 1-1.)

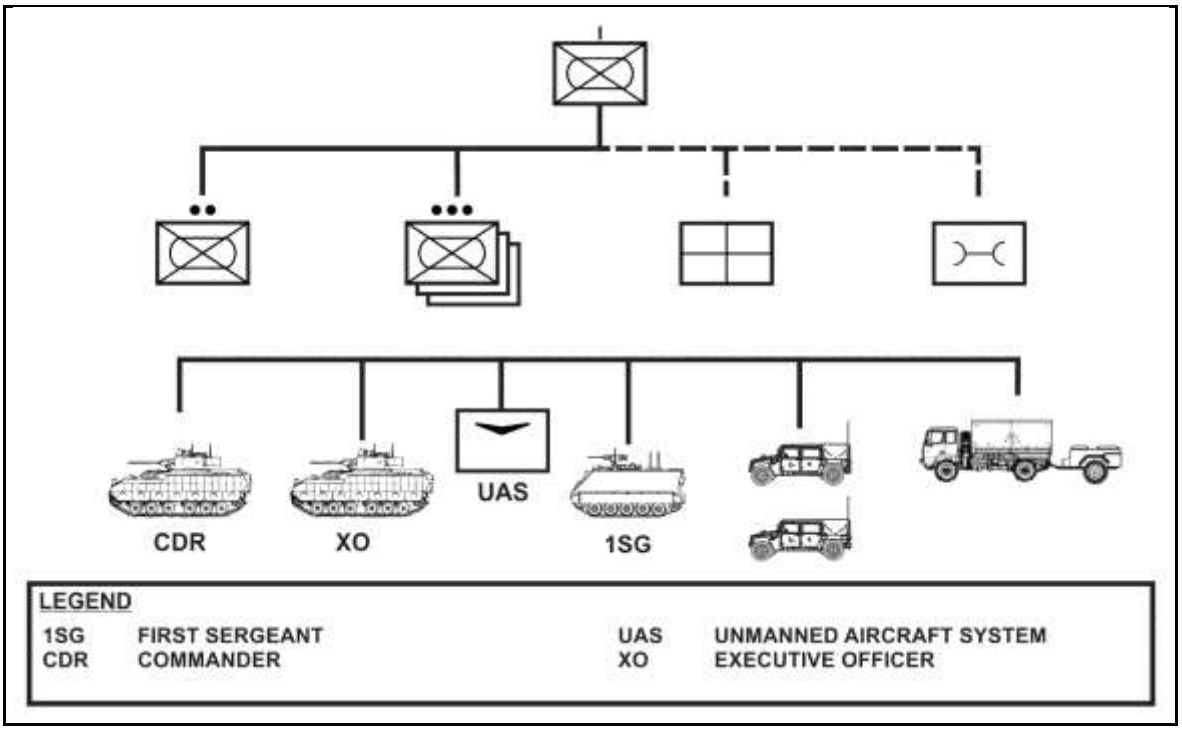

Figure 1-1. Mechanized Infantry company organization

1-4. The role of the mechanized Infantry company is to fight and win engagements on any battlefield in any operational environment. Its design optimizes the mechanized Infantry company to conduct offensive and defensive tasks. However, it is equally organized and trained to conduct operations focused on stability tasks. The mechanized Infantry company is capable of deploying worldwide and conducting missions across the full range of military operations.

MISSION, CAPABILITIES, AND LIMITATIONS

1-5. The mission of the mechanized Infantry company is to close with the enemy by maneuver, to destroy or capture the enemy, repel the enemy's assault by fire, and engage in close combat and counterattack. The company maneuvers in all types of terrain, weather, and visibility conditions. It capitalizes on all forms of mobility, mechanized, motorized, foot patrols, as well as helicopters and tactical airlift. The inherent versatility of Infantry makes it well suited for employment against asymmetrical threats across the full range of military operations.

1-6. The mechanized Infantry company is equipped with the BFV. The BFV provides the company the ability to assault rapidly through small arms and indirect fires to deliver the Infantry squads to an objective or critical point and continue the assault dismounted while being supported by the firepower of the BFV. It is best suited to less restrictive terrain and combat against an armored enemy.

1-7. The mechanized Infantry company has the following capabilities:

- Seizes and retains key terrain.
- Assaults enemy positions.
- Infiltrates enemy positions.
- Conducts combat operations under limited visibility.
- Clears enemy from restricted and urban terrain.
- Blocks mounted/dismounted avenues of approach.
- Conducts dismounted or mounted patrols.
- Conducts reconnaissance and security operations.

- Participates in air assault operations
- Repels enemy attacks with close combat.
- Establishes strong points to deny the enemy key terrain or flank positions.
- Establishes battle positions and engagement areas as part of a larger defense.
- Operates in a chemical, biological, radiological, and nuclear (CBRN) environment.

1-8. The mechanized Infantry company has these limitations:

- High consumption rate of Class III, V, and IX.
- Dependency on logistics packages from the forward support company (FSC) to maintain continuous operations.
- Lack of organic mortars.
- Built-up areas, dense woods, and other restricted terrain reduce the mobility of BFVs.
- Existing or reinforcing obstacles can restrict or reduce BFV mobility.
- BFVs pose a variety of challenges in gap (wet and dry) crossing operations. (The company may experience difficulty finding adequate fording sites or a bridge with sufficient weight classification.)

ARMOR COMPANY

1-9. The Armor company comprises a headquarters and three tank platoons that are organized, equipped, and trained to fight with organic assets or as a task-organized company team. The headquarters element comprises two tanks commanded by the CDR and XO. (See figure 1-2.)

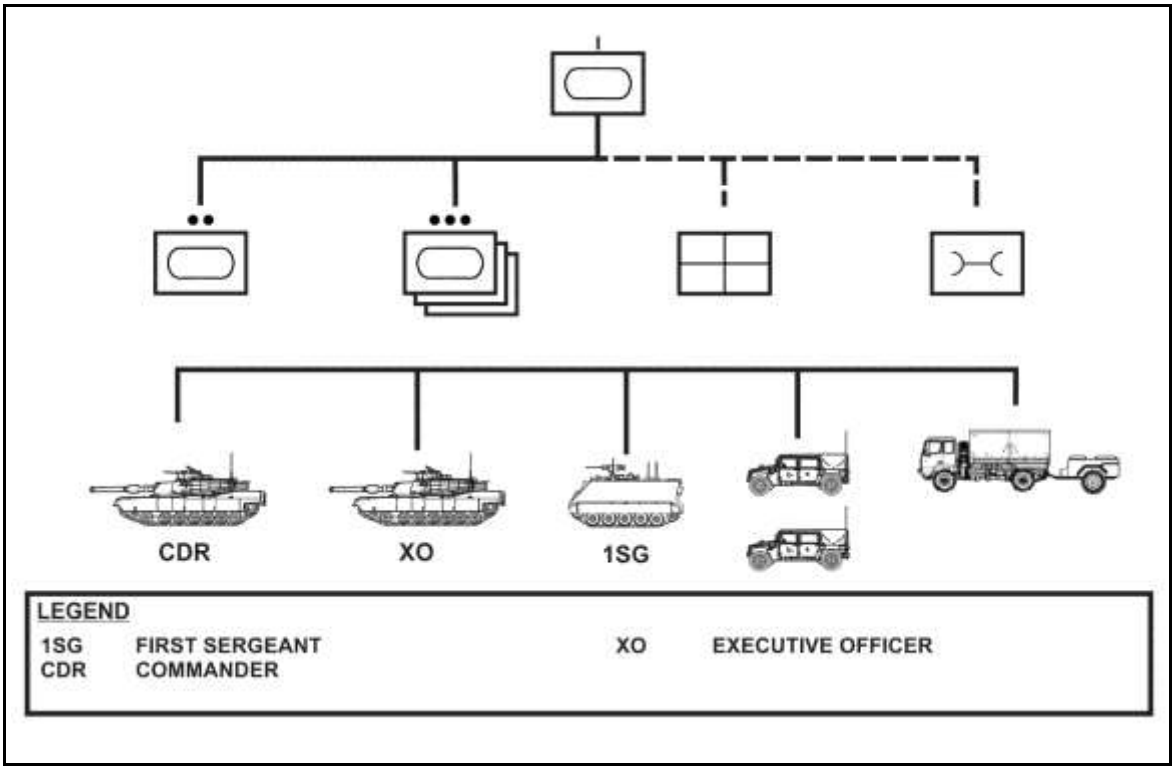

Figure 1-2. Armor company organization

1-10. The role of the Armor company is to fight and win engagements through speed, firepower, and shock effect. As with the mechanized Infantry company, the Armor company is designed to conduct offensive and defensive tasks. However, it may be organized and trained to conduct operations focused on stability tasks.

The company is capable of deploying worldwide and conducting operations across the full range of military operations.

MISSION, CAPABILITIES, AND LIMITATIONS

1-11. The following paragraphs provide a discussion of the Armor company mission, its capabilities, and its limitations.

1-12. The mission of the Armor company is to close with the enemy by maneuver to destroy or capture the enemy, repel the enemy's assault by fire, and engage in close combat and counterattack. The company maneuvers in all types of terrain, weather, and visibility conditions. It capitalizes on long-range, direct fire combat with enemy mechanized or armored units in open terrain with speed and shock effect.

1-13. The greatest benefits of the Armor company are its speed and power. Its main battle tanks provide a lethality, survivability, and mobility unmatched by any other ground combat platform. This provides the company the ability to assault rapidly through open terrain engaging enemy mechanized and armor units on the move and at long range with devastating effects.

1-14. The Armor company has the following capabilities:

- Conducts operations requiring firepower, mobility, armor protection, and shock effect.
- Reduces mine and wire obstacles when equipped with mine rollers and mine plows.
- Employs a combination of fire and maneuver to destroy enemy tanks, fighting vehicles, anti-armor systems, and emplacements.
- Seizes key terrain.
- Assaults enemy positions.
- Provides support, in the form of Armor protection and fires, to Infantry and engineer elements in restricted or urban terrain or during an assault.
- Conducts combat operations under limited visibility.
- Conducts mounted patrols.
- Blocks mounted avenues of approach.
- Conducts security, screen, and guard operations.
- Operates effectively as a counter-attack or penetration force as part of a larger operation.
- Establishes battle positions and engagement areas as part of a larger defense.
- Establishes strong points to deny the enemy key terrain or flank positions.
- Operates in a CBRN environment.

1-15. The Armor company has these limitations:

- Very high consumption rate of Class III, V, and IX.
- Dependency on logistics packages from the FSC to maintain continuous operations.
- Vulnerability to enemy infantry antiarmor when built-up areas, dense woods, and other restricted terrain significantly reduce the mobility and maneuverability of tanks.
- Restricted, reduced, or ceased tank mobility when overcoming existing or reinforcing obstacles.
- Significant challenges in gap (wet and dry) crossing operations. (The company may experience difficulty finding adequate fording sites or a bridge with sufficient weight classification.)
- Limited capability to retain ground without Infantry support.

ROLE OF THE COMPANY TEAM IN CAB

1-16. The CAB is capable of performing the full range of military operations. It is a balanced combat organization built around two mechanized Infantry companies and two Armor companies. The CAB commander may organize his companies as teams to accomplish the battalion's mission.

1-17. The organization and capabilities of the Armor and mechanized Infantry company team make it well suited for employment as part of the CAB. The company team employs maneuver and integrates sustainment assets to complete tactical tasks in support of the CAB commander's intent. To do this, the company commander gains information on the enemy, develops the situation, and directs the team to deploy and

execute its mission. A company team's area of operations (AO) is a geographic area (including the airspace), assigned by a higher commander, in which the company commander has the responsibility and authority to conduct military operations. Aos allow the commander to employ his assigned and supporting systems to the limit of their capabilities.

ROLE OF THE COMPANY TEAM IN OTHER ORGANIZATIONS

1-18. The Armor and mechanized Infantry company team is capable of performing missions with other types of organizations. As a part of a brigade combat team (BCT), the company team can perform or support air assault, route security, BCT reserve, and security force assistance. The company team may augment a screen or reconnaissance mission.

1-19. As a member of an Infantry brigade combat team or Stryker brigade combat team, the company team is capable of conducting the full range of military operations. Across unified land operations, there is an overlap in which the company team and Infantry forces can operate. Employing Infantry forces with heavy units is a combat multiplier. Using a mixed force in this overlap takes advantage of the strengths of the forces and offsets their respective limitations. The integration of a company team and Infantry forces enhances the friendly force's ability to take advantage of the enemy force's structure and to attack its weaknesses and seize the initiative. These operations take advantage of the Infantry unit's ability to operate in severely restricted terrain, such as urban areas, forests, and mountains, combined with the mobility and firepower inherent in armor and Stryker units.

1-20. As part of a reconnaissance squadron, the company team can augment the economy-of-force role for either offensive or defensive tasks. The company team can conduct zone, area, or route reconnaissance, area security, and screens.

SECTION II – COMPANY TEAM OPERATIONS

1-21. An operation is a military action, comprising two or more related tactical actions, designed to achieve a strategic objective, in whole or in part. A tactical action is a battle or engagement, employing lethal or nonlethal actions, designed for a specific purpose relative to the enemy, the terrain, friendly forces, or other entity. Tactical actions include widely varied activities such as an attack to seize a piece of terrain or destroy an enemy unit, the defense of a population, and the training of other militaries to assist security forces as part of building partner capacity.

DECISIVE ACTION

1-22. Decisive action is the continuous, simultaneous combinations of offensive, defensive, and stability or defense support of civil authorities tasks. Company teams must be prepared to conduct any combination of these primary tasks either independently or part of a larger force. The tasks are as follows:

- **Offensive.** These are combat operations conducted to defeat and destroy enemy forces and seize terrain, resources, and population centers. They impose the commander's will on the enemy. Even when conducting defensive tasks, seizing and retaining the initiative requires executing offensive tasks at some point.
- **Defensive.** These are combat operations conducted to defeat an enemy attack, gain time, economize forces, and develop conditions favorable for offensive or stability tasks. Successful defenses are aggressive, and commanders use all available means to disrupt enemy forces.
- **Stability.** These include various missions, tasks, and activities conducted outside the U.S. in coordination with other instruments of national power to maintain or reestablish a safe and secure environment, restore essential government services, and provide emergency infrastructure reconstruction and humanitarian relief.
- **Defense Support of Civil Authorities.** Defense support of civil authorities includes tasks that address the consequences of natural or man-made disasters, accidents, terrorist attacks, and incidents in the United States and its territories. Army forces conduct defense support of civil authorities tasks in support of homeland defense when the size and scope of events exceed the capabilities or capacities of domestic civilian agencies.

COMBAT POWER

1-23. Combat power is the total means of destructive, constructive, and information capabilities that a military unit/formation can apply at a given time. Army forces generate combat power by converting potential into effective action. Commanders conceptualize their capabilities in terms of combat power. Combat power has eight elements: leadership, information, mission command, movement and maneuver, intelligence, fires, sustainment, and protection. Commanders apply leadership and information throughout and multiply the effects of the other six elements of combat power: mission command, movement and maneuver, intelligence, fires, sustainment, and protection, which are collectively known as warfighting functions. Commanders apply combat power through warfighting functions using leadership and information.

LEADERSHIP

1-24. Confident, competent, and informed leadership increases the effectiveness of all other warfighting functions by formulating sound concepts and assuring discipline and motivation in the force. Good leaders are the catalyst for success. Effective leadership can compensate for deficiencies in all warfighting functions because it is the most dynamic element of combat power. The opposite is true; ineffective leadership can counteract advantages in warfighting capabilities.

1-25. *Leadership* is the process of influencing people by providing purpose, direction, and motivation, while operating to accomplish the mission and improving the organization (ADP 6-22). An Army leader, by virtue of assumed role or assigned responsibility, inspires and influences people to accomplish the mission. Army leaders motivate people to pursue actions, focus thinking, and shape decisions for the greater good of the organization. They instill in Soldiers the will to win.

1-26. Leaders influence not only Soldiers, but other people as well. Face-to-face contact with people in the AO encourages cooperation between civilians and Soldiers. Army leaders work with members of other services and civilian organizations. These leaders strive for the willing cooperation of multinational military and civilian partners. The Army requires self-aware, adaptive leaders who can defeat the enemy in combat and master complex operations dominated by stability missions.

1-27. Through training and leading by example, leaders develop cultural awareness in Soldiers. This characteristic improves Soldiers' abilities to cope with the challenges of complex environments. Leadership ensures Soldiers understand the purpose of operations and use their full capabilities. In every operation, Army leaders clarify purpose and mission, direct operations, and set the example for courage and competence. They hold their Soldiers to the Army's values and ensure they follow the law of war.

INFORMATION

1-28. Information is a powerful tool in the operational environment. In modern conflict, information has become nearly as important as lethal action in determining success or failure in operations at all levels. Every engagement, battle, and major operation requires complementary activities that inform and influence a global audience and affect morale within the operational area. Commanders use information to understand, visualize, describe, and direct the warfighting functions. They depend on data and information to increase the effectiveness of the warfighting functions.

1-29. Since information shapes the perceptions of the civilian population, it shapes the operational environment. All parties in a conflict use information to convey their message to various audiences. These include enemy forces, adversaries, and neutral and friendly populations. Information is particularly critical in operations focused on stability tasks where the population is a major factor in success or failure.

1-30. The Army continues to modernize information systems. These improved information systems provide leaders with the information needed to enhance and focus the warfighting functions. Leadership based on relevant information enables commanders at all levels to make informed decisions about how to apply combat power best. Ultimately, this creates opportunities to achieve decisive results.

WARFIGHTING FUNCTIONS

1-31. A *warfighting function* is a group of tasks and systems (people, organization, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives (ADRP 3-0). All warfighting functions possess scalable capabilities to mass lethal and nonlethal effects. No

warfighting function is exclusively decisive, shaping, or sustaining, but may contain elements of more than one type of operation.

MISSION COMMAND

1-32. The *mission command warfighting function* is the related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0). Mission command uses mission orders to ensure disciplined initiative within the commander's intent, enabling agile and adaptive commanders, leaders, and organizations.

1-33. The commander is the central figure in mission command. Mission command invokes the greatest possible freedom of action to subordinates, facilitating their abilities to develop the situation, adapt, and act decisively through disciplined initiative in dynamic conditions within the commander's intent.

MOVEMENT AND MANEUVER

1-34. The *movement and maneuver warfighting function* is the related tasks and systems that moves and employs forces to achieve a position of relative advantage over the enemy and other threats (ADRP 3-0). Direct fire is inherent in maneuver, as is close combat. The function includes tasks associated with force projection related to gaining a positional advantage over the enemy. Maneuver is the employment of forces in the operational area through movement in combination with fires to achieve a position of advantage in respect to the enemy to accomplish the mission. Maneuver is the means by which commanders mass effects of combat power to achieve surprise, shock, and momentum. Effective maneuver requires close coordination with fires. Movement is necessary to disperse and displace the force as a whole or in part when maneuvering.

INTELLIGENCE

1-35. The *intelligence warfighting function* is the related tasks and systems that facilitate understanding of the enemy, terrain, and civil considerations (ADRP 3-0). The commander drives the intelligence warfighting function. Intelligence is more than just collection. It is a continuous process that involves analyzing information from all sources and conducting operations to develop the situation.

FIRES

1-36. The *fires warfighting function* refers to related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process (ADRP 3-0). It includes tasks associated with integrating and synchronizing the effects of these types of fires with the other warfighting functions.

SUSTAINMENT

1-37. The *sustainment warfighting function* refers to the related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0). The endurance of Army forces is primarily a function of their sustainment. Sustainment determines the depth and duration of Army operations. It is essential to retaining and exploiting the initiative. Sustainment is the provision of logistics, personnel services, and health services support needed to maintain operations until mission accomplishment.

Note. Sustainment health services exclude force health protection, which is a component of the protection warfighting functions.

PROTECTION

1-38. The *protection warfighting function* refers to the related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADRP 3-0). Preserving theforce includes protecting personnel (combatant and noncombatant), physical assets, and information of

the U.S. and multinational partners. The protection warfighting function facilitates the commander's ability to maintain the forces' integrity and combat power. The protection warfighting function includes force health protection. Force health protection includes all measures to promote, improve, or conserve the mental and physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards.

MISSION COMMAND

1-39. *Mission command* is a philosophy of command (ADP 6-0). It is the exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations. It is commander-led and blends the art of command and the science of control to integrate the warfighting functions to accomplish the mission. Mission command allows subordinates the greatest possible freedom of action.

ART OF COMMAND

1-40. Command is an art that depends on actions only humans can perform. It is a skill sharpened by experience, study, and observation. Commanding is more than simply leading Soldiers, units, and making decisions. Commanders strive to understand all aspects of the operational environment. They understand that operations affect and are affected by human interactions. Effective commanders must create a positive command climate that instills a sense of mutual trust throughout the command. The art of command comprises—

- Authority.
- Decision making.
- Leadership.

1-41. Authority refers to the right and power to judge, act, or command. It includes responsibility, accountability, and delegation.

1-42. Decision making refers to selecting a course of action (COA) as the one most favorable to accomplish the mission. Commanders apply knowledge to the situation, thus translating their visualization into action.

1-43. *Leadership* refers to the process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improve the organization (ADP 6-22). Commanders lead through a combination of personal example, persuasion, and compulsion.

SCIENCE OF CONTROL

1-44. Control is the regulation of forces and warfighting functions to accomplish the mission in accordance with the commander's intent. It is fundamental to directing operations. Company commanders exercise control over forces in their AO. Control is the process by which the commander follows up a decision and minimizes deviation from his concept. It entails supervision of all aspects of the operation, including synchronization of all systems and activities.

1-45. The commander's mission command system, especially the staff, assists the commander with control. However, the commander remains the central figure. The science of control comprises—

- Information.
- Communication.
- Structure.
- Degree of control.

1-46. Commanders use the science of control to manage information. Information must be relevant to mission command: accurate, timely, usable, complete, precise, and reliable. Relevant information fuels understanding and fosters initiative.

1-47. Commanders disseminate and share information among people, elements, and places. Communication is more than the simple transmission of information. It is a means to exercise control over forces. Effective commanders conduct face-to-face talks with their subordinates to ensure they fully understand and to receive feedback from them. Commanders use face-to-face communication to assess the mental and physical state of

subordinates expressed in nonverbal means. Nonverbal means may include gestures, sighs, and body language. They may provide indictors on the effectiveness of the communication.

1-48. Organizational structure helps commanders exercise control. Structure refers to a defined organization that establishes relationships and guides interactions among elements. It includes procedures for coordinating among an organization's groups and activities. Structure is both internal as in the structure such as the command post and external, like command and support relationships among subordinate forces.

1-49. A key aspect of mission command is determining the appropriate degree of control imposed on subordinates. The proper degree of control depends on each situation and is not easy to determine. Different operations and phases of operations require tighter or more relaxed control over subordinate elements than other phases require.

COMPANY COMMAND POST

1-50. As the Armor and mechanized Infantry company team is not resourced as a command post (CP) by the modified table of organization and equipment, it is generally limited to a tent or one of its organic headquarter's vehicles as the CP. Armor company team options include the 1SG's M113 or the Bradley fire support vehicle (BFSV). The 1SG's vehicle is organic to the team and thus is more likely to be available during the preparation phase. The BFSV is large enough to serve as the CP, but it may be retained by the CAB and, therefore, would not be available to the company. The mechanized Infantry team may use one of its headquarter's BFVs, the 1SG's M113, or the BFSV. Disadvantages in using a BFV are that it may be required for a mounted rehearsal and is required for boresighting.

1-51. Although the company team is not resourced to operate a functional CP, not establishing a CP may have an impact on the company team's day-to-day performance, particularly during sustained operations. The CP is a combat multiplier especially during the planning and preparation phases of an operation. This in turn frees company leadership to focus their attention on more important matters. However, the CP is not designed to act as a battle tracking platform during execution of an operation. Vehicles that comprise the CP revert to their primary purposes once the line of departure (LD) is crossed or the not later than defend time has arrived.

PURPOSE

1-52. During preparation the company team CP assists the commander and his subordinate leaders to prepare for operations by—

- Providing a centralized point for information gathering and dissemination, coordination, time management, and tracking the status of subordinate elements.
- Providing communications with higher, lower, adjacent, and supporting units.
- Assisting the commander in planning, coordinating, and issuing company operations orders (OPORDs).

RESOURCING COMMAND POST

1-53. Perhaps the most critical decision in establishing a company CP is committing resources. Ideally, intelligence personnel are assigned down to the company to perform company-level intelligence tasks; however, if not assigned, those duties and functions are performed by other personnel. The level of dedicated resources, personnel, and equipment to the company CP has a direct correlation to the effectiveness of the fusion between operations and locally developed intelligence.

1-54. Several options are available for manning a company team CP. A basic manning requirement is for two noncommissioned officers (NCOs) to serve as noncommissioned officers in charge (NCOIC). One noncommissioned officer (NCO) is in charge during the day shift and the other during the night shift. These NCOs must be able to perform their duties with little or no supervision. Several members of the company can meet this manning requirement. They include, but are not limited to:

- Company master gunner.
- XO's gunner.
- Signal support specialist.
- Separate headquarters PSG (if available).

1-55. Members of the headquarters section or other attached elements can man other positions in the CP (for example, radio telephone operator [RTO]) on a rotating basis. These members include the crews of headquarters tanks or BFVs and the company command group drivers. At a minimum, there should be two RTOs. One RTO supports the day shift and the other the night shift. The RTO assists the NCOIC as needed to accomplish the mission**.**

FUNCTIONS

1-56. The company team CP assists the commander by reducing the number of items he must personally track and report. This further frees the commander to conduct troop-leading procedures (TLP) during the preparation phase. Examples of CP operations include the following:

- Record incoming information (such as status reports, warning orders, and fragmentary orders).
- Refine the situation template (SITTEMP), continuously, using the latest intelligence and distribute the updated SITTEMP to all company team elements.
- Post current guidance, timelines, and overlays.
- Pass required reports to the higher headquarters.
- Track unit battle preparations and logistical and maintenance status.
- Conduct required coordination with adjacent and flank units.
- Facilitate bottom-up refinement of planning and preparation.

1-57. The CP may act as the point of contact for attached or operational control units. The company CP is intended as an information management center during the plan and preparation phase of an operation and is not designed or equipped to perform as a tactical operations center during mission execution. It can further assist the commander with his TLP by providing the following services:

- Supervises and enforces the timeline.
- Reproduces overlays.
- Converts acetate overlays to digital format (in digital units).
- Constructs sand tables for company team and platoon rehearsals.

TASKS

1-58. Tasks the CP executes include:

- Processes, analyzes, and organizes information.
- Supervises production of company-level products, including intelligence summaries, enemy activity overlays, and situational maps.
- Battle tracks and provides mission control of current operations, if necessary.
- Alerts the command group or subordinate elements as needed.
- Coordinates with higher and subordinate units to receive, send, and track daily and reoccurring information requirements.
- Tracks friendly unit locations.
- Tracks times for planned patrols or upcoming combat operations.
- Tracks current manning status and task organization of unit.
- Tracks current status of key weapons systems, vehicles, and equipment.
- Records and verifies daily and accurately any messages needing the attention of the commander, 1SG, or XO when they are not available.
- Updates daily company tracking charts, maps, and other products specified by the commander.
- Tracks company significant activities, maintains a staff journal, uses DA Form 1594 (*Daily Staff Journal or Duty Officer's Log)*.

1-59. The information operations matrix tracks which company element is tasked as the delivery agent, the message conveyed, the target, the objective, and the associated information requirement the message supports.

COMPANY INTELLIGENCE SUPPORT TEAM

1-60. Many company commanders perform basic intelligence tasks that include refining collection capabilities, analyzing ongoing metrics in the AO, and performing basic intelligence support to targeting. To accomplish these tasks, company commanders organize small intelligence support teams from within their units that provide meaningful intelligence. These company intelligence support teams (COISTs) do this by analyzing and reporting information collected by the company while receiving, parsing, and reporting intelligence collected by both adjacent and higher units.

1-61. A company intelligence support team is an organization formed by the company commander to perform tasks that facilitate his understanding and knowledge of the AO. COISTs assist a company by—

- Developing and maintaining situational understanding and knowledge of the relevant aspects of the AO.
- Developing information requirements.
- Facilitating flow of information to and from company elements and the battalion intelligence staff officer.
- Turning information into intelligence.

1-62. Ideally, companies organize COISTs as a part of the predeployment process. The COIST identifies requirements based on mission variables (mission, enemy, terrain and weather, troops and support available-time available and civil considerations [METT-TC]) before arriving in the AO and analysis should include activities within the unit's area of interest. The function of the COIST is to describe the effects of the weather, enemy, terrain and local population upon friendly operations to reduce the commander's uncertainty and aid in decision making. This function is accomplished by gleaning intelligence from the information gathered, recommending a course of action to the commander, and disseminating any intelligence to members of the company as well as the higher and lateral units. The COIST provides platoons with information and current intelligence concerning the company operations. The battalion intelligence cell provides an initial analysis of the AO to the company; COISTs refine these products based on knowledge gained by Soldiers performing missions in the company AO.

ORGANIZATION

1-63. Ideally, a COIST should consist of enough individuals to enable continuous operations and provide the depth required by the team to integrate with operations personnel and complete multiple COIST tasks.

1-64. The commander identifies COIST personnel as soon as possible in the training cycle. These individuals attend home station and mobile training team training, execute COIST duties during combat training center rotations, and remain in the COIST throughout the deployment. The early identification, training, and stability of COIST personnel ensure optimum performance.

GENERAL REQUIREMENTS

1-65. Commanders select personnel that meet the following basic requirements and attributes:

- Authorized access to Secret information.
- Ability to organize information.
- Ability to think, speak, and write clearly.
- Knowledgeable of or able to learn computer skills and common office software applications.

Intelligence Oversight

1-66. COIST members are required to follow all intelligence oversight regulations, primarily AR 381-10. It specifies that Army personnel cannot perform intelligence collection on U.S. persons. Therefore, in compliance with AR 381-10, the COIST may not collect intelligence on any U.S. person. Members should receive annual intelligence oversight training to ensure they understand the regulation and are compliant. Specific products sent and received from the battalion should be coordinated in the battalion COIST SOPs.

DUTY POSITIONS

1-67. Members of a COIST may include a leader and analysts.

Leader

1-68. The leader is responsible for the COIST. The officer in charge (OIC)—

- Tasks COIST members appropriately and prioritizes their work.
- Is responsible for communicating with the battalion to verify what intelligence and collection assets are available to the company.
- Ensures intelligence communications flow in both directions.
- Performs the duties of COIST Soldiers, if necessary.
- Guides subordinate Soldiers.
- Supervises ongoing intelligence support in the company.

Team Members

1-69. Soldiers in COIST complete most of the COIST duties. Although they may not have attended the all-source intelligence analyst training at the Intelligence Center of Excellence, analysts are trained to accomplish analyst functions. Team members are responsible for reading, interpreting, researching, and analyzing all available information on the company AO or other information that may affect company operations.

1-70. The primary duties of the team members include—

- Receiving and processing incoming reports and messages.
- Assisting in determining the significance and reliability of incoming information.
- Making mission recommendations to the company commander.
- Assisting in integrating incoming information with current intelligence.
- Preparing and maintaining the situation map.
- Assisting in identifying information gaps.
- Assisting in preparing and submitting requests for information (RFIs) to adjacent and higher units.
- Assembling and proofreading reports and consolidating them into usable products.
- Preparing intelligence preparation of the battlefield (IPB) products.
- Assisting in preparing reports on captured enemy materiel.
- Assisting in target development.
- Drafting periodic and special reports and briefings.
- Sensitizing patrols to information collection requirements.
- Briefing and debriefing patrols.
- Preparing and providing mission briefs and debriefs.

COMPANY INTELLIGENCE ANALYST

1-71. The company intelligence analyst (MOS 35F) is assigned to the battalion intelligence cell. Once the COIST is formed, the company intelligence analyst joins the company. The company intelligence analyst generally supports the company commander by—

- Advising the commander on intelligence related matters.
- Establishing and maintaining systematic, cross-referenced intelligence records and files.
- Refining battalion IPB products for company/troop/battery planning.
- Supporting commander's situational understanding of the operational environment.
- Assisting in the analysis and evaluation of intelligence holdings to determine changes in enemy capabilities, vulnerabilities, and probable COAs.
- Assisting in preparing threat characteristics and estimates of the enemy organization's strengths, capabilities, and tactics, techniques, and procedures.
- Recommending company/troop/battery information requirements and specific information requirements to the commander.
- Supporting target development.

COMPANY INTELLIGENCE ANALYST TASKS

1-72. The company intelligence analyst task list should be simple and allow the team to operate effectively while following the intelligence process described in ADRP 2-0. These individual intelligence analyst tasks are also performed by members of the COIST when formed by the company commander.

FACILITATE COMPANY COMMANDERS SITUATIONAL UNDERSTANDING AND VISUALIZATION

1-73. The analyst supports company situation development by collecting and processing information collected from missions. The intelligence analyst is responsible for logging and plotting significant activities (SIGACTs) and initial reports that may become official SIGACTs. COISTs may also present patrol prebriefs and debriefs while performing initial analysis on information to develop intelligence. The analyst focuses on collecting the information, initial analysis for the company-specific AO, transmitting the analysis to the battalion, and updating company products. The subordinate tasks are—

- **Assist in developing company requirements**—translates the battalion information collection tasks into company requirement recommendations to the commander. Company requirements answer general questions that allow commanders to successfully accomplish their missions.
- **Perform IPB for company operations**—receives IPB products from the battalion and refines the products to satisfy company requirements. Company-level IPB products are synchronized with higher and lateral echelons to improve the overall intelligence picture.
- **Submit request for information collection**—forwards company requirements to the battalion to satisfy the commanders information requirements that can't be answered through company level operations.
- **Support the commander's TLP**—produces products and materials that support the commander's ability to issue the operations order and conduct a rehearsal.

EVALUATE AND PERFORM ANALYSIS

1-74. The intelligence analyst performs basic analysis by organizing information and using analytical tools to process information. This analysis requires organization of information into categories and the identification of patterns or relationships among the categories. The analyst takes products and reports from the battalion and modifies these to support company operations. The subordinate tasks are—

- **Integrate and refine products and information**—refines and modifies higher headquarters products, reports, and graphics to support the company's operations.
- **Conduct pattern and event analysis**—analyzes significant activities to determine changes in enemy capabilities, vulnerabilities, and probable COAs.
- **Input threat portion of the common operational picture**—ensures relevant information concerning the threat and key civil considerations are included in the common operational picture.
- **Update the commander**—ensures the commander is updated on the enemy situation and key civil considerations either via radio or in person briefing.

MANAGE INFORMATION AND INTELLIGENCE

1-75. The subordinate tasks are—

- **Establish and maintain communications**—ensures the company enters the battalion operations and intelligence (O&I) communications network and maintains the company presence on the O&I network to reports and disseminate information and intelligence. This includes digital and analogs means of communications.
- **Manage the patrol prebriefing/debriefing process**—ensures patrols are sensitized to the key company requirements before initiating a patrol and captures the key details and events that occurred during the patrol.
- **Creation of data files and databases**—ensures that information and data collected by the company is archived on a data file or database for use in analytical processes and products. This includes updating higher headquarter data files and databases.

SUPPORT COMPANY OPERATIONS

1-76. The intelligence analyst provides information and refined intelligence that facilitates the company's ability to conduct site exploitation, targeting, bilateral/key leader engagement, and assists with detainee operations. The subordinate tasks are—

- **Support site exploitation**—provides information and intelligence that predicts existence of items of intelligence value at the site; identifies individuals who may be at the site; prepares a line of tactical questioning for detainees at the site; and provides the instructions for handling captured materials, documents, and equipment.
- **Support targeting**—provides focused intelligence that supports target development, target support meetings, enhances the company detection and assessment capability, and that identifies high-value individuals or organizations with the company's area of operation.
- **Support bilateral and key leader engagement**—maintains all information on community leaders, including nonlethal target packages. This information is organized by position, family, personal traits, links to other individuals, and historical activities of community individuals.
- **Assist with detainee operations**—ensures that departing patrols have blank detainee packets and the knowledge to complete the forms properly; maintains detainee packets and tracks the current location and status of the company's detainees; and ensures company's detainees are enrolled in the appropriate biometrics data files/databases.

SECTION III – DUTIES AND RESPONSIBILITIES OF KEY PERSONNEL

1-77. This section describes the duties and responsibilities of key personnel. While this is not a conclusive list, it describes the basics for key personnel.

COMMANDER

1-78. The commander is responsible for everything the company team does, or fails to do, in executing its assigned missions. The commander's responsibilities include leadership, training, tactical employment, training, administration, personnel management, supply, maintenance, sustainment activities, and more. These duties require the commander to understand the capabilities of the team's, Soldiers, and equipment and to understand how to employ them to the best tactical advantage. At the same time, the commander must be well versed in threat organizations, doctrine, and equipment.

1-79. Using this knowledge, the commander prepares his unit for combat operations. Ultimately, he must know how to exercise the art and science of mission command effectively and decisively. He must be flexible and use sound judgment to make correct decisions at the right time based on the higher commander's intent and the tactical situation. He must be able to visualize, describe, and direct his subordinate leaders in clear, complete combat orders.

EXECUTIVE OFFICER

1-80. The XO is the company team's second in command, primary sustainment planner, and coordinator. (See Chapter 8 for more information on the XO as sustainment planner.) He and his crew may serve as the team net control station for both radio and digital traffic. The XO's other duties include the following:

- Ensures accurate, timely tactical reports are sent to the CAB.
- Assumes command of the company team, as required.
- Plans and supervises the company team sustainment effort before battle, in conjunction with the 1SG.
- Assists in preparation of the operations order (OPORD), specifically paragraph 4 (service support).
- Conducts tactical coordination with higher, adjacent, and supporting units.
- Assists the commander in issuing orders to the company team headquarters and attachments, as required.
- Conducts additional missions as required, including serving as OIC for a quartering party, or as the leader of the detachment left in contact in a withdrawal.

- Assists the commander in preparations for follow-on missions, including rehearsal site preparation.
- Positions himself with supporting effort during the battle to assist the commander in mission command.
- Assists the commander in refining IPB products during planning and portraying the enemy force during combined arms rehearsals.
- Manages the company timeline.
- Manages sustainment survivability assets (for example, armored combat earthmover/dozer during defensive operations).
- Facilitates the integration of attachments and enablers to the company team.
- Serves as OIC of the company CP when established.

FIRST SERGEANT

1-81. The 1SG is the team's senior NCO and is usually its most experienced Soldier. He is the commander's primary tactical advisor and an expert in individual and NCO skills. He is the team's primary sustainment operator. He helps the commander plan, coordinate, and supervise all logistical activities that support the tactical mission. (See chapter 8 for more information on the 1SG as sustainment planner.)

1-82. The 1SG's specific duties include the following:

- Executes and supervises routine operations. They include enforcing the tactical SOPs; planning and coordinating training; coordinating and reporting personnel and administrative actions; and supervising supply, maintenance, communications, and field hygiene operations.
- Supervises, inspects or observes all matters designated by the commander**.** For example, he may observe and report on a portion of the company team's zone, proof positions, or assist in proofing an EA.
- Plans, rehearses, and supervises key sustainment actions in support of the tactical mission**.** These activities include resupply of Class I, III, and V products and materials; maintenance and recovery; medical support, casualty evacuation (CASEVAC); and processing.
- Assists and coordinates with the XO in all critical functions.
- Assists the XO in sustainment planning for the company.
- Serves as quartering party NCOIC, as needed.
- Conducts training and ensures proficiency in individual and NCO skills and small-unit collective skills. These duties support the company team's mission-essential task list.
- Establishes and maintains the foundation for company team discipline in conjunction with the commander.
- Assists the commander in maintaining 100 percent accountability.

PLATOON LEADER

1-83. The PL is responsible to the company commander for leadership, discipline, training, and sustainment activities in the platoon. He is responsible for platoon equipment maintenance and for the platoon's success in combat. (Refer to FM 3-21.8 for more information.)

1-84. The PL must be proficient in the tactical employment of the platoon in concert with the rest of the company team. He must have a solid understanding of TLP and be able to apply them quickly and efficiently. He must know the capabilities and limitations of the platoon's personnel and equipment and be well versed in enemy organizations, doctrine, and equipment.

PLATOON SERGEANT

1-85. The PSG is second in the platoon's chain of command and is accountable to the PL for the leadership, discipline, training, and Soldiers' welfare in the platoon. He coordinates the platoon's maintenance and logistical requirements and handles the personal needs of individual Soldiers. The PSG fights his section in concert with the platoon leader's section. (Refer to FM 3-21.8 for more information.)

FIRE SUPPORT OFFICER

1-86. The company FSO coordinates all fires for the maneuver company. He helps the commander plan, coordinate, and execute the team's fire support requirements and operations. He integrates all fires to support the company commander's scheme of maneuver. During operational planning, he develops and refines a fire support plan based on the commander's concept and guidance. (Refer to ATP 3-09.30 for more information.) His duties include the following:

- Advises the commander on all fire support matters.
- Requests, adjusts, and directs all fire support.
- Trains the fire support team (FIST) in applicable fire support matters.
- Serves as the commander's primary advisor on the enemy's indirect fire capabilities.
- Assists the commander in developing the OPORD to ensure full integration of fires.
- Recommends targets and fire control measures (particularly fire support coordination measures), and determines methods of engagement and responsibility for firing the targets.
- Determines the specific tasks and instructions to plan and execute the fire support plan.
- Develops an observation plan with limited visibility contingencies that supports the company team and CAB missions.
- Allocates forward observers and other observers to maintain surveillance of target and named areas of interest.
- Develops the fire support plan with the company commander, and in coordination with the CAB fire support officer. This includes locations of final protective fires (FPFs) and priority targets allocated to the team.
- Ensures that the fire support plan or fire support execution matrix is prepared and disseminated to key personnel.
- Assists the commander in briefing the fire support plan as part of the company team OPORD and coordinates with platoon Fos to ensure they understand their responsibilities.
- Refines and integrates the company team target worksheet; submits the completed worksheet to the CAB fires cell.
- Assists the commander in incorporating execution of the indirect fire plan into each company team rehearsal. This includes integrating indirect Fos into the rehearsal plan.
- Alerts the company commander if a request for fires against a target has been denied.
- Monitors the location of friendly units and assists the commander in clearance of indirect fires.
- Requests counter-battery support in response to enemy artillery and mortar attacks.
- Provides emergency control of close air support (CAS)-missions in the absence of qualified Joint Terminal Attack Controller.

MASTER GUNNER

1-87. The master gunner is the company team's expert in vehicle gunnery. He also—

- Assists the commander in gunnery training and preparing for combat.
- Ensures that every crew and platoon can make effective use of firepower assets.

1-88. These preparations include assisting tank and BFV crews by establishing or coordinating boresight lines, plumb and synchronize ramps (for M1A2 units), and use of live-fire screening and zero ranges.

1-89. The master gunner—

- Assists turret mechanics from the FMT in troubleshooting and repairing turret main armament and fire control systems.
- Assists in EA development and direct fire planning for both offensive and defensive operations, as the company team's direct fire weapons expert.

1-90. In the planning and preparation phases, he also—

- Assists in sustainment coordination and execution.
- Serves as NCOIC of the CP.

- Assists the commander in designating/determining the location and emplacement of target reference points (TRPs) for both day and night visibility.

1-91. During combat operations, the master gunner—

- Advises the commander on applicable battlesight ranges.
- Serves in other ways, such as:
  - Gunner on a command tank or BFV.
  - Sustainment operator riding on the armored personnel carrier.
  - Section NCOIC in the company team's wheeled vehicles, with responsibility for facilitating communications with the task force.

SUPPLY SERGEANT

1-92. The supply sergeant requests, receives, issues, stores, maintains, and turns in supplies and equipment for the company team. He coordinates all supply requirements and actions with the 1SG and the battalion logistics officer (S-4). Usually, the supply sergeant's position is with the CAB field trains. The headquarters and headquarters company or FSC commander or the support PL (depending on the sustainment organization of the battalion) supervises him. The supply sergeant communicates with the company team using the task force administration/logistics radio net or Force XXI Battle Command Brigade and Below (FBCB2) The supply sergeant's specific responsibilities are—

- Controls the company team cargo truck and water trailer and supervises the supply clerk/armorer.
- Monitors company team activities and the tactical situation.
- Anticipates and reports logistical requirements.
- Coordinates and monitors the status of the company team's logistics requests.
- Coordinates and supervises the organization of the company team logistics package (LOGPAC) in the field trains.

SIGNAL SUPPORT SPECIALIST

1-93. The signal support specialist supervises the operation, maintenance, and installation of organic digital, wire, and frequency modulation communications. During tactical operations, he usually travels with the company FMT. In many situations, the signal support specialist is a Soldier with the rank of specialist or below. He may or may not have the experience to take on additional duties such as NCOIC of the CP. His specific responsibilities include sending and receiving routine traffic and making required communications checks. The signal support specialist—

- Performs limited troubleshooting of the company team's organic communications equipment and provides the link between the company team and the task force for maintenance of communications equipment.
- Supervises all activities for the company team's communications security equipment, which entails the requisition, receipting, training, maintenance, security, and employment of this equipment and related materials.
- Assists the commander in planning and employment of the team's communications systems. Using the commander's guidance, the signal support specialist may assist in preparation of paragraph 5 of the OPORD.
- Supervises or assists in company team CP operations. These include relaying information, monitoring the situation, establishing the CP security plan and radio watch schedule, and informing the commander and subordinate elements of significant events.

EMERGENCY CARE SERGEANT

1-94. The emergency care sergeant cares for sick, injured, or wounded company personnel. He provides tactical combat casualty care in the tactical operational environment with three phases of care; care under fire, tactical field care, and tactical evacuation care. Emergency medical treatment performed by the emergency care sergeant may include opening an airway, starting intravenous fluids, controlling hemorrhage, preventing or treating for shock, splinting fractures or suspected fractures, and providing relief for pain. The

emergency care sergeant performs under the technical supervision of the battalion surgeon or physician assistant. The emergency care sergeant—

- Oversees and provides guidance to platoon medics, as required.
- Trains personnel to evaluate injured, wounded, or ill friendly and enemy personnel for priority of treatment as they arrive at the company casualty collection point.
- Oversees sick call screening for the company.
- Requests and coordinates the evacuation of sick, injured, or wounded personnel under the direction of the company 1SG.
- Assists in first aid training of the company personnel and enhanced first aid procedures of combat lifesavers.
- Requests Class VIII supplies from the battalion aid station (BAS).
- Recommends locations for the company casualty collection point.
- Provides guidance to the company's combat lifesavers.
- Monitors the tactical situation and anticipates and coordinates health support system requirement and Class VIII resupply, as needed.
- Advises the company commander and 1SG on mass casualty operations.
- Advises the commander and 1SG concerning the status of force health protection (FHP) with ways and means to reduce preventable illness and injury.
- Keeps the 1SG informed of the status of casualties and coordinates with him for additional sustainment requirements.

1-95. During tactical operations, the senior company medic monitors the tactical situation and responds as needed. He administers appropriate medical treatment to casualties, supervises other medical personnel, and directs evacuation of casualties from platoon positions when required.

FIELD MAINTENANCE TEAM CHIEF

1-96. The FMT chief—

- Supervises the FMT.
- Decides whether damaged vehicles and equipment can be repaired in place or must be evacuated.
- Coordinates evacuation and repair operations.
- Manages requisition of Class IX supplies in conjunction with the task force maintenance officer.
- Manages the employment of the FMT mechanics and evacuation assets.
- Monitors the tactical situation.
- Directs maintenance team personnel during combat repair and recovery operations.
- If necessary, leads the company team combat trains in the 1SG's absence.

Chapter 2
Offense

Offensive tasks are aimed at destroying or defeating an enemy. Offensive tasks impose U.S. will on the enemy and achieve decisive victory. A commander may conduct offensive tasks to deprive the enemy of resources, seize decisive terrain, deceive or divert the enemy, develop intelligence, or hold an enemy in position. Offensive action enables the company team to create and maintain the initiative and choose the time and place that the enemy does not expect or in a manner that the enemy is unprepared for. Armor and mechanized Infantry company teams can perform a variety of critical offensive tasks because of their ability to move quickly and employ lethal firepower with a high level of protection. Company teams attack throughout the AO to defeat enemy forces. The offense ends when the company team achieves the purpose of its tasks, reaches a limit of advance, or reaches culmination. This chapter discusses basics of the offense, common offensive planning considerations, actions on contact, movement to contact (MTC), and attack.

SECTION I – CHARACTERISTICS OF THE OFFENSE

2-1. Surprise, concentration, tempo, and audacity characterize the offense. (Refer to ADRP 3-90 for more information about characteristics of the offense.)

SURPRISE

2-2. In the offense, surprise is achieved by attacking the enemy at a time or place they do not expect or in a manner for which they are unprepared. Estimating the enemy commander's intent and denying him the ability to gain thorough and timely situational understanding are necessary to achieve surprise. Unpredictability and boldness help gain surprise. The direction, timing, and force of the attack also help achieve surprise. Surprise delays enemy reactions, overloads and confuses mission command systems, induces psychological shock in enemy soldiers and leaders, and reduces the coherence of the defense. By diminishing enemy combat power, surprise enables the attackers to exposit enemy paralysis and hesitancy.

2-3. The Armor and mechanized Infantry company team achieves surprise by—

- Gaining and maintaining information dominance by conducting thorough intelligence, surveillance and reconnaissance, and counter reconnaissance efforts.
- Striking the enemy from an unexpected direction at an unexpected time through the unique combination of rapid mounted movement and the ability of units to cross any type of terrain.
- Quickly changing the tempo of the operations.
- Being unpredictable.

CONCENTRATION

2-4. Concentration is the massing of overwhelming effects of combat power to achieve a single purpose. Commanders balance the necessity for concentrating forces to mass effects with the need to disperse them to avoid creating lucrative targets. Advances in ground and air mobility, target acquisition, and long-range precision fires enable attackers to rapidly concentrate effects. Mission command systems provide reliable, relevant information that assists commanders in determining when to concentrate forces to mass effects.

2-5. The Armor and mechanized Infantry company team achieves concentration through—

- Careful planning and coordination based on a thorough terrain and enemy analysis plus accurate reconnaissance.

- Designation of a main effort and allocation of resources to support it.
- Continuous information flow.
- Massing firepower using long-range precision fires and maneuver.

TEMPO

2-6. *Tempo* is the relative speed and rhythm of military operations over time with respect to the enemy (ADRP 3-0). Controlling or altering tempo is necessary to retain initiative. A faster tempo allows attackers to quickly penetrate barriers and defenses and destroy enemy forces in depth before they can react. Commanders adjust tempo as tactical situations, sustainment necessity, or operational opportunities allow to ensure synchronization and proper coordination, but not at the expense of losing opportunities to defeat the enemy. Rapid tempo demands quick decisions. It denies the enemy the chance to rest and continually creates opportunities.

AUDACITY

2-7. Audacity is a simple plan of action, boldly executed. Commanders display audacity by developing bold, inventive plans that produce decisive results. Commanders demonstrate audacity by violently applying combat power. They understand when and where to take risks and do not hesitate as they execute their plan. Commanders dispel uncertainty through action; they compensate for lack of information by seizing the initiative and pressing the fight. Audacity inspires Soldiers to overcome adversity and danger.

BASICS OF THE OFFENSE

2-8. The four offensive tasks are MTC, attack, exploitation, and pursuit. Company teams may conduct MTC and attack as an independent organization. However, company teams can only participate in the conduct of an exploitation or pursuit as part of a larger element of a higher headquarters executing these tasks.

MOVEMENT TO CONTACT

2-9. *Movement to contact* is a type of offensive task designed to develop the situation and establish or regain contact. (FM 3-96) It creates favorable conditions for subsequent tactical actions. The commander conducts a MTC when the enemy situation is vague or not specific enough to conduct an attack. Forces executing this task seek to make contact with the smallest friendly force feasible. A MTC may result in a meeting engagement. Movements to contact include search and attack, and cordon and search operations.

2-10. A meeting engagement is a combat action that occurs when a moving force engages an enemy at an unexpected time and place. The commander has five options:

- Attack.
- Defend.
- Bypass.
- Delay.
- Withdraw once making contact with enemy forces.

ATTACK

2-11. An *attack* is an offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both (FM 3-96). Attacks incorporate coordinated movement support by direct and indirect fires. They may be either decisive or shaping operations. Attacks may be hasty or deliberate, depending on the time available for assessing the situation, planning, and preparing. However, based on mission variable analysis, the commander may decide to conduct an attack using only fires. An attack differs from a MTC because enemy main body dispositions are at least partially known, which allows the commander to achieve greater synchronization. This enables the massing of effects of the attacking force's combat power more effectively than in a MTC.

EXPLOITATION

2-12. *Exploitation* is an offensive task that usually follows a successful attack and is designed to disorganize the enemy in depth (ADRP 3-90). Exploitations seek to disintegrate enemy forces to the point where they

have no alternative but surrender or take flight. Exploitations take advantage of tactical opportunities, foresee or unforeseen. Division and higher headquarters normally plan exploitations as branches or sequels.

PURSUIT

2-13. A *pursuit* is an offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it (FM 3-96). A pursuit normally follows a successful exploitation. However, any offensive task can transition into a pursuit if it is apparent that enemy resistance has broken down entirely and the enemy is fleeing the battlefield. Pursuits entail rapid movement and decentralized control. Division and higher headquarters normally plan pursuits as branches or sequels.

COMMON PLANNING CONSIDERATIONS

2-14. The warfighting functions are critical tactical activities the commander can use to plan, prepare, and execute. Synchronization and coordination among the warfighting functions are critical for success. Below describes selected warfighting functions and other planning considerations.

MISSION COMMAND

2-15. The commander's mission and intent determine the scheme of maneuver and the allocation of available resources. The commander reduces the scope of the initial mission if only a few resources are available. For example, a commander could tell subordinates to clear their AOs of all enemy platoon-size and larger forces instead of clearing their AOs of all enemy forces if those subordinates lack the time or forces needed to accomplish the latter task. (Refer to FM 6-0 for more information)

2-16. All planning for offensive tasks addresses the mission variables, with special emphasis on:

- Commander's intent.
- Missions and objectives, to include task and purpose, for each subordinate element
- Scheme of maneuver.
- Location of key leaders.
- Suspected and known enemy positions, strengths, and capabilities.
- Courses of action.
- Required control graphics.
- Priorities of fire.
- Bypass Criteria.
- Reporting Requirements.
- Primary and alternate communications.

MOVEMENT AND MANEUVER

2-17. The commander maneuvers to avoid enemy strengths and create opportunities to increase the effects of friendly fires. The commander secures surprise by making unexpected maneuvers, rapidly changing the tempo of ongoing operations, avoiding observation, and using deceptive techniques and procedures. The commander seeks to overwhelm the enemy with one or more unexpected blows before the enemy has time to react in an organized fashion. This occurs when the attacking force is able to engage the defending enemy force from positions that place the attacking force in a position of advantage with respect to the defending enemy force, such as engaging the enemy from a flanking position.

2-18. The commander maneuvers to close with and destroy the enemy by close combat and shock effect. *Close combat* is warfare carried out on land in a direct-fire fight, supported by direct and indirect, and other assets (ADRP 3-0). Close combat defeats or destroys enemy forces, or seizes and retains ground. Close combat encompasses all actions that place friendly forces in immediate contact with the enemy where the commander uses direct fire and movement in combination to defeat or destroy enemy forces or seize and retain ground.

REHEARSALS

2-19. Rehearsals are practice sessions conducted to prepare units for an upcoming operation or event. They are essential in ensuring thorough preparation, coordination, and understanding of the commander's plan and intent. Company team commanders should never underestimate the value of rehearsals

2-20. Effective rehearsals require leaders and, when time permits, other company team soldiers to perform required tasks, ideally under conditions that are as close as possible to those expected for the actual operation. At their best, rehearsals are interactive; participants maneuver their actual vehicles or use vehicle models or simulations while verbalizing their elements' actions. During every rehearsal, the focus is on the **how** element, allowing subordinates to practice the actions called for in their individual scheme of maneuver.

Rehearsal Types

2-21. The company team commander may utilize several types of rehearsals in the same operation.(Refer to FM 6-0 for more information) These types of rehearsals are:

- **Combined arms rehearsal.** This is the preferred rehearsal type for armor and mechanized infantry companies. The combined arms rehearsal is conducted when all subordinate OPORDs are complete. This rehearsal type involves all the elements of the company team and ensures that all subordinate plans are fully synchronized within the overall company plan.
- **Back brief:** The commander may require the platoon leaders to back brief him once they have developed their plan to ensure it is nested with the company concept of operation, or identify problems with synchronization.
- **Support rehearsal.** The company team should normally conduct its own support rehearsal, however the commander should be aware that his higher headquarters may, which will likely impact his 1SG/XO or his FSO. He should include this consideration in his overall company timeline (See chapter 8 in this manual).
- **Battle drill or SOP rehearsal.** This rehearsal type is critical to the company team as many actions the company and platoons will take are drills and SOP. This type of rehearsal ensures that all participants understand specified technique or procedure. They are used most extensively by the platoon, squad and section. Battle drill rehearsals can effective be used early in the TLP once the commander has identified the type of mission the company will conduct. For example, if the company will be conducting an attack, the commander may require the platoons to begin some offensive battle drill rehearsals (contact drill, action drill, react to obstacle drill) while he continues the TLP. Other examples may include platoon breach procedures, clear a trench, or react to ambush. Lastly this type of rehearsal may be highly beneficial in confirming a newly attached platoon understands a specific company SOP or drill.

Rehearsal Techniques

2-22. **Terrain Model.** This is the most preferred rehearsal technique for the company team as it helps subordinates visualize the battle in accordance with their commander's intentions. Terrain models can be constructed in a variety sizes and detail depending on the needs of the commander. Generally terrain models should be constructed where it overlooks the actual terrain the company operates on. This technique usually involves the company's key leaders but is not limited to key leaders.

2-23. **Radio/Digital.** This is a reduced-force or full-force rehearsal conducted when the situation does not allow the company team to gather at one location. Subordinate elements check their communications systems and rehearse key elements of the company team plan.

2-24. **Map.** This is usually conducted as part of a confirmation brief involving subordinate leaders and/or portions of their elements. The leader uses the map and overlay to guide participants as they brief their role in the operation. If necessary, he can use a sketch map.

2-25. **Sketch Map.** This technique can be used almost anywhere, day or night. The procedures are the same as with the terrain model rehearsal except the commander uses a sketch instead of a terrain model. This technique may be conducive to situations where a terrain model is not practical or visibility is limited. This technique may dictate a reduced force involving only key leaders.

2-26. **Digital Terrain Model**. Digital terrain models are virtual representations of the area of operations. Units drape high-resolution imagery over elevation data thereby creating a fly-through or walk-through. Holographic imagery produces the view in three dimensions.

2-27. **Reduced Force.** This technique may require the same terrain as the full dress rehearsal. It differs from full dress in that it only involves key leaders of the directing unit and subordinates unit. In this technique, commander must first decide the level of leader involvement he desires. His selected leaders then rehearse the plan while traversing (usually mounted) the actual or like terrain.

2-28. **Full-Dress.** This rehearsal recreates the entire operation on terrain similar to that over which the unit will operate. It involves every Soldier and system participating in the operation. Although this technique requires a significant expenditure of resources and time it also produces the most detailed understanding of the mission. This technique presents several options:

- The company team may rehearse with platoons or other team elements going "force on force" against each other.
- The company team trains can portray enemy forces to prompt action by the platoons or other team elements.
- The entire team may go against another task force element.

Dismount Points for Infantry Squads

2-29. The company commander will designate where his squads will dismount to begin execution of the fight. These dismount points can be short of the objective, on the objective, or beyond the objective.

Short of the Objective

2-30. The advantages of dismounting the squads before reaching the objective include protection of the infantrymen during the dismount process, control at the dismount point, and the ability to continue suppression of the enemy by supporting indirect fires during the dismount. Disadvantages include exposure of the squads to indirect and small arms fires as they maneuver to the objective area and the possibility that suitable dismount points will be targeted for enemy indirect fires.

On the Objective

2-31. The primary advantages of this option are greater speed and enhanced protection of the squads as the company team maneuvers to the objective area. There are several disadvantages in dismounting on the objective—difficulty in orienting the dismounted elements on specific locations and objectives while they are riding in the BFVs; problems that may arise in establishing control at dismount points; and vulnerability of BFVs to short-range anti-armor weapons.

Beyond the Objective

2-32. This dismount option has several potential advantages—effective control at the dismount point; greater ease in orienting the dismounted elements to the terrain and the objectives of the assault; confusion or disorientation among enemy elements when they are forced to fight in an unexpected direction. At the same time, there are significant disadvantages, including vulnerability of the company team to attack from enemy positions in depth or from enemy reserve forces; vulnerability of the BFVs to short range antiarmor systems; and increased risk of fratricide.

Combat Formations

2-33. A *combat formation* is an ordered arrangement of forces for a specific purpose and describes the general configuration of a unit on the ground (ADRP 3-90). A commander can use six different combat formations depending on the mission variables: column, line, echelon (left or right), wedge, and vee. Terrain characteristics and visibility determine the actual arrangement and location of the unit's personnel and vehicles within a given formation.

Note. The formations shown in illustrations in this chapter are examples only; they generally are depicted without consideration of terrain and other METT-TC factors that are always the most crucial element in the selection and execution of a formation. Leaders must be prepared to adapt their choice of formation to the specific situation.

Column

2-34. The column is used when speed is critical, when the company team is moving through restricted terrain on a specific route, and/or when enemy contact is not likely. Each platoon normally follows directly behind the platoon in front of it. If the situation dictates; however, vehicles can disperse laterally to enhance security. Figure 2-1 on page 2-7 illustrates this type of column movement. The column formation has the following characteristics, advantages, and limitations:

- It provides excellent control and fires to the flanks.
- It permits only limited fires to the front and rear.
- It is easy to control.
- It provides extremely limited overall security.
- It is normally used for traveling only.

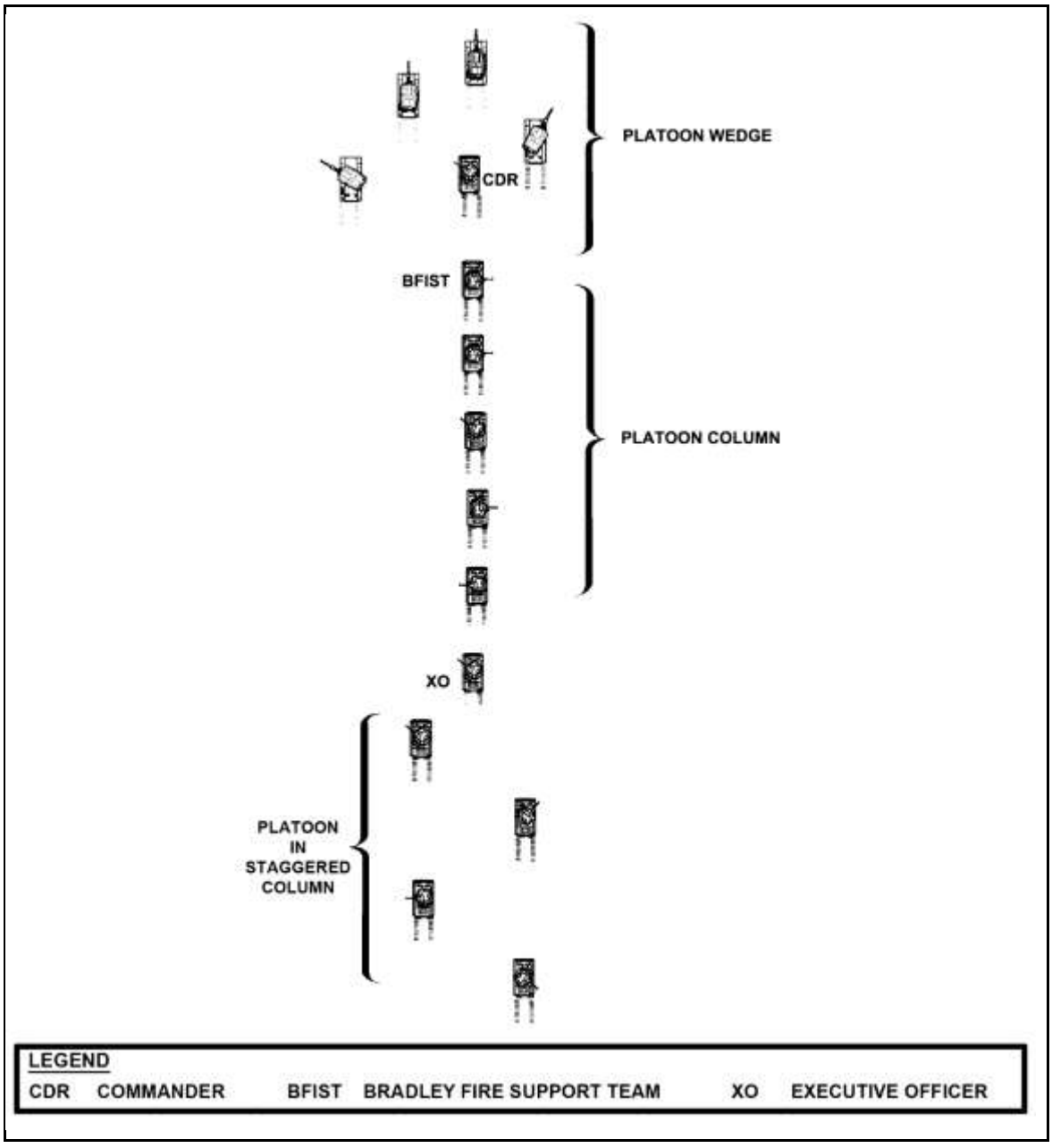

Figure 2-1. Company team column with platoons in column, staggered column, and wedge

Staggered Column

2-35. The staggered column formation is a modified column formation with one section leading, and one section trailing to provide overwatch. It is used when there is a limited area for lateral dispersion, and/or when enemy contact is possible. The staggered column has the following characteristics, advantages, and limitations:

- It permits good fires to the front and good fires to the flanks.
- It provides good overall security.
- It is easy to control.
- It can be used when speed is critical.

Wedge

2-36. The wedge formation is often used when the enemy situation is unclear or contact is possible. In the company team wedge, the lead platoon is in the center of the formation with the remaining platoons located to the rear of and outside the lead platoon (see figure 2-2). The wedge has the following characteristics, advantages, and limitations:

- It permits excellent fires to the front and good fires to the flanks.
- It is easy to control.
- It provides good security to the flanks.
- It can be used with the traveling and traveling overwatch techniques.
- It allows rapid transition to bounding overwatch.

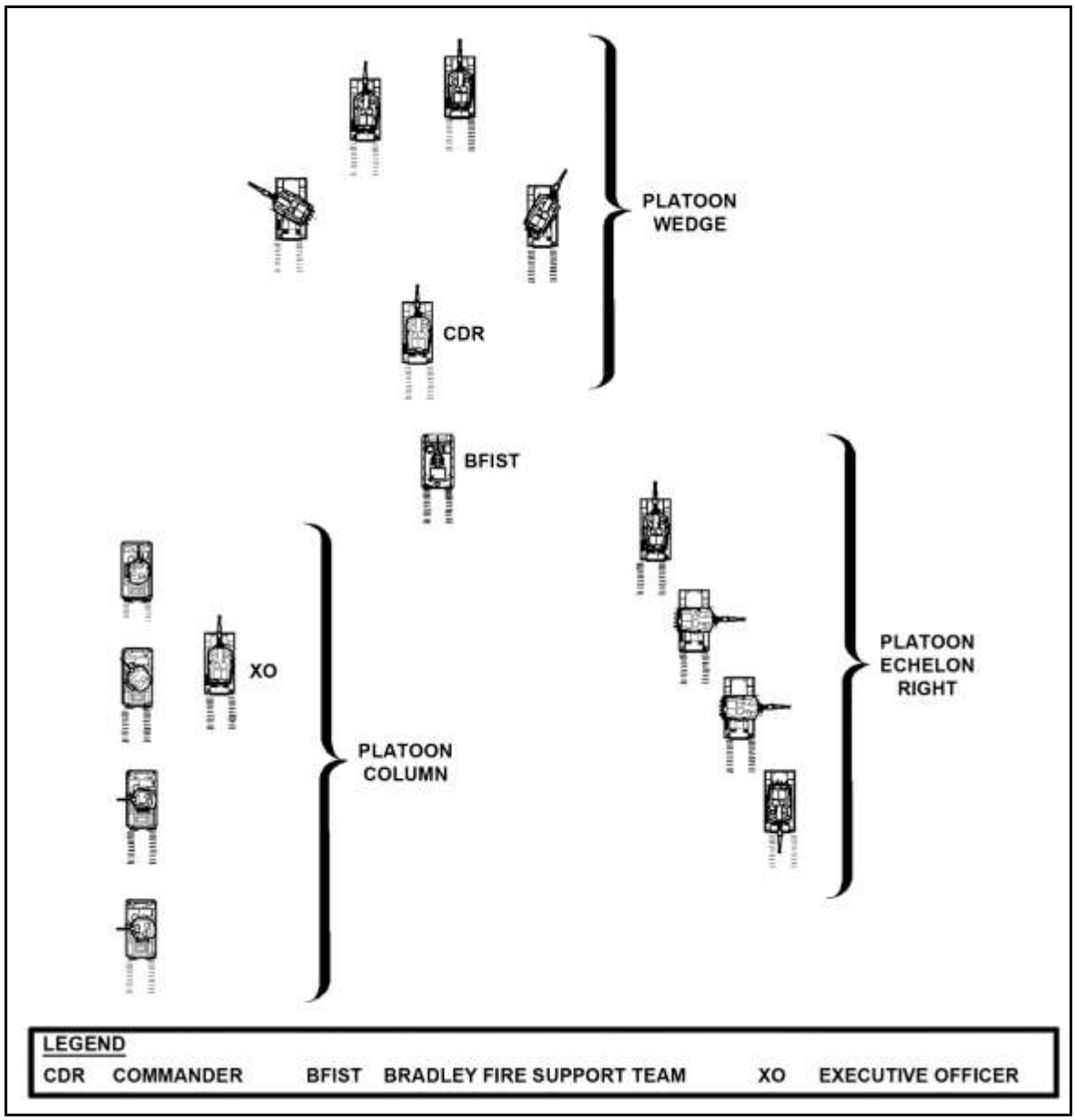

Figure 2-2. Company team in wedge with platoons in different formations

Vee

2-37. The vee formation is used when enemy contact is possible (see figure 2-3). In the company team vee, the center platoon is located in the rear of the formation, while the remaining platoons are to the front of and outside the center platoon. The vee has the following characteristics, advantages, and limitations:

- It permits more firepower to the front than the wedge and affords good fires to the flanks.
- It is more difficult to control than the wedge and makes it more difficult for vehicles to maintain proper orientation.
- It allows one platoon in the formation to maintain freedom of maneuver when contact occurs.
- It facilitates rapid deployment into any other formation.
- It can be used with the traveling and traveling overwatch techniques.
- It allows rapid transition to bounding overwatch.

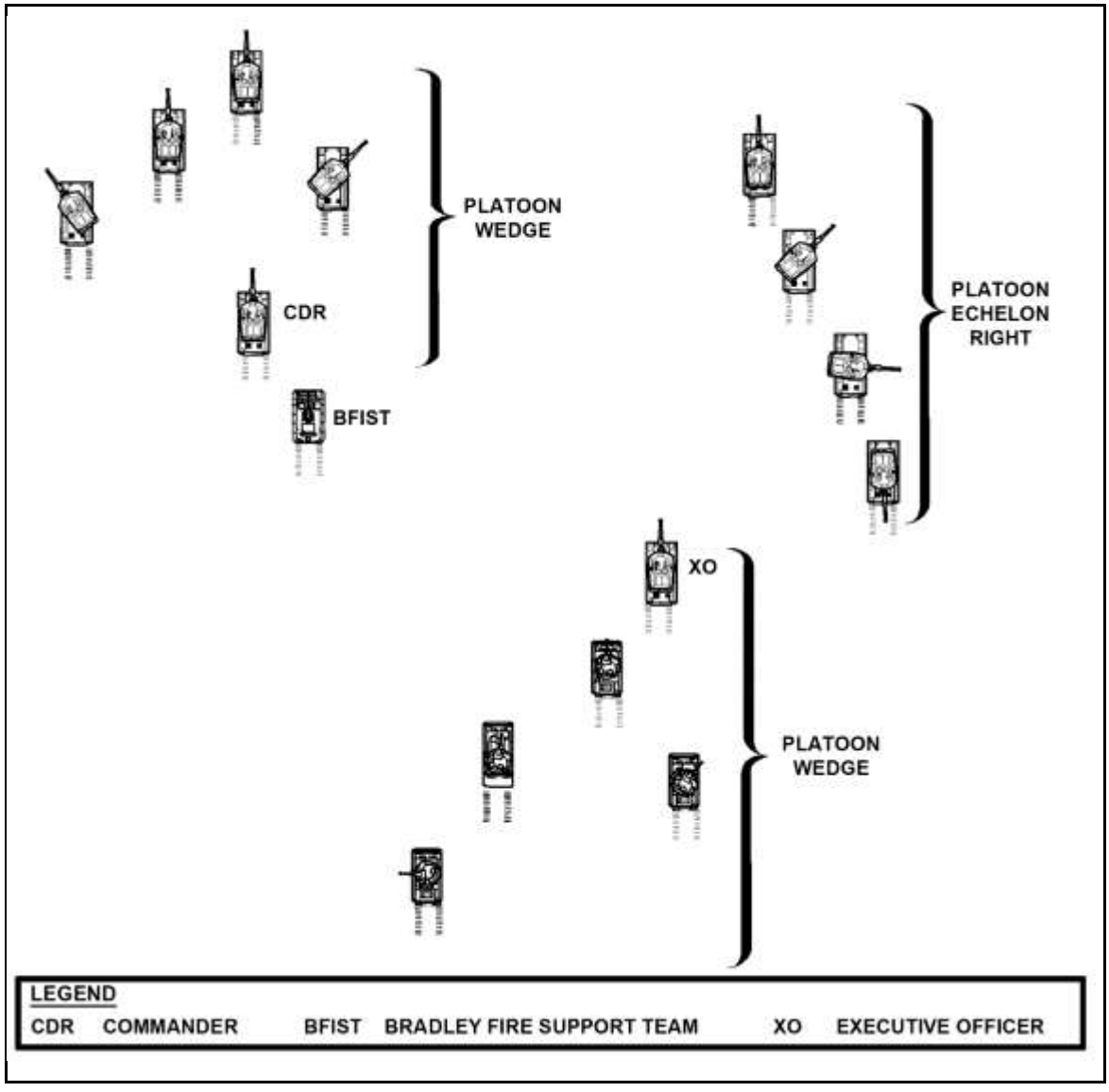

Figure 2-3. Company team in vee with platoons in different formations

Line

2-38. The line formation is primarily used when a unit or element is crossing a danger area or needs to maximize firepower to the front (see figure 2-4). In the company team line, platoons move abreast of one another and are dispersed laterally. The line formation has the following characteristics, advantages, and limitations:

- It permits maximum fires to the front or rear, but minimum fires to the flanks.
- It is difficult to control.
- It is less secure than other formations because of the lack of depth.
- It is the most difficult formation from which to make the transition to other formations.
- It may be used in the assault to maximize the firepower and/or shock effect of the heavy company team. This is normally done when there is no more intervening terrain between the unit and the enemy, when AT systems are suppressed, and/or when the unit is exposed to artillery fire and must move rapidly.

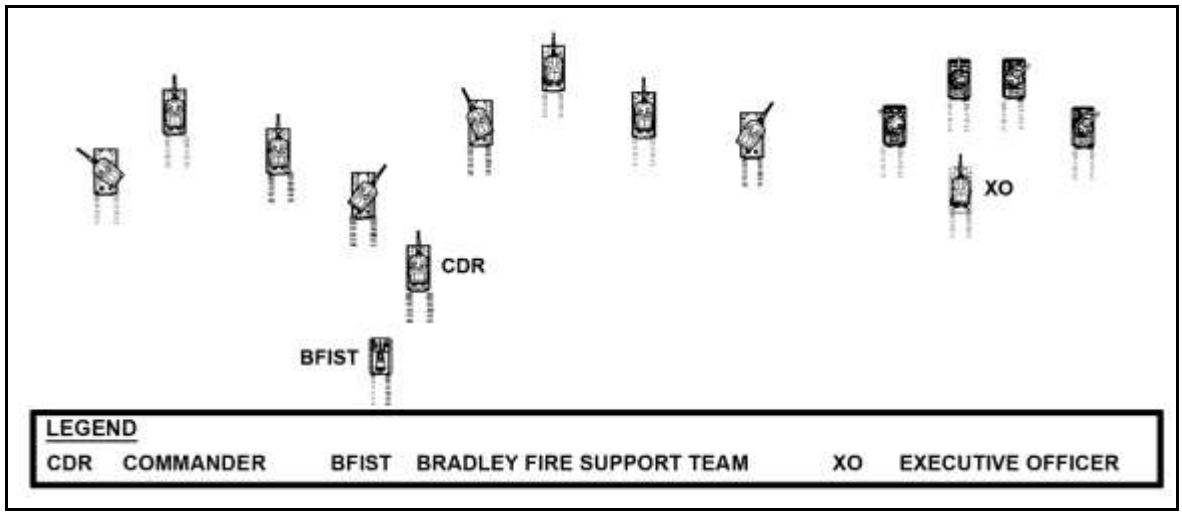

Figure 2-4. Company team in line with platoons in wedge formations

Echelon

2-39. The echelon formation is used when the task force wants to maintain security and/or observation of one flank and enemy contact is not likely (see figure 2-5 on page 2-11). The company team echelon formation (either echelon left or echelon right) has the lead platoon positioned farthest from the echeloned flank, with each subsequent platoon located to the rear of and outside the platoon in front of it. The echelon formation has the following characteristics, advantages, and limitations:

- It is difficult to control.
- It affords excellent security for the higher formation in the direction of the echelon.
- It facilitates deployment to the echeloned flank.

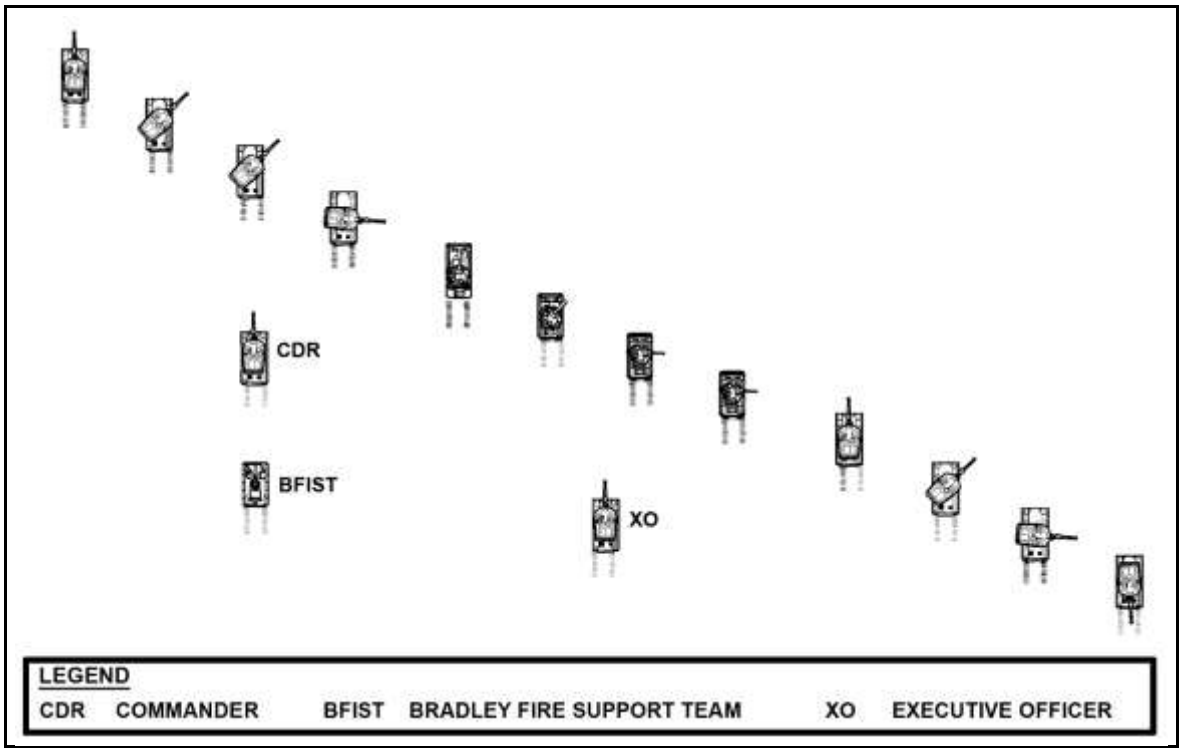

Figure 2-5. Company team in echelon right with platoons in echelon right

Coil and Herringbone

2-40. The coil and herringbone are platoon-level formations, employed when elements of the company team are stationary and must maintain 360- degree security.

2-41. Combat formations allow a unit to move on the battlefield in a posture suited to the commander's intent and mission. A unit may employ a series of combat formations during an attack; each has its advantages and disadvantages. Subordinate units within a combat formation can employ their own combat formations, consistent with their particular situation. The commander considers the advantages and disadvantages of each formation in the areas of mission command, maintenance, firepower orientation, ability to mass fires, and flexibility when determining the appropriate formation for a given situation. All combat formations use one or more of the three movement techniques: traveling, traveling overwatch, and bounding overwatch.

2-42. The commander's use of standard formations allows the unit to rapidly shift from one formation to another, giving additional flexibility when adjusting to changes in the mission variables. (This results from a commander rehearsing subordinates so that they can change formations using standard responses to changing situations, such as actions on contact.) By designating the combat formation planned for use, the commander—

- Establishes the geographic relationship between units.
- Indicates probable reactions once the enemy makes contact with the formation.
- Indicates the level of security desired.
- Establishes the preponderant orientation of subordinate weapon systems.
- Postures friendly forces for the attack.

Intelligence

2-43. A commander uses the products of the IPB process to identify any aspect within the AO or area of interest that will affect the friendly force and enemy force operation. An *area of interest* is that area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory.

This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission (JP 3-0).

2-44. By studying the terrain, the company commander determines the principal mounted and dismounted avenues of approach to the objective. The company commander tries to determine the most advantageous area for the enemy's main defense to occupy, routes that the enemy may use to conduct counterattacks, and other factors (such as observation and fields of fire, avenues of approach, key terrain, obstacles, and cover and concealment). The attacking unit must continuously conduct reconnaissance during the battle because it is unlikely that the company commander has complete knowledge of the enemy's intentions and actual actions.

Fires

2-45. Fire superiority must be gained and maintained throughout all offensive operations. Leaders conduct fires planning concurrently with maneuver planning at all levels. Brigade combat teams and CABs typically use top-down fire support planning, with bottom-up refinement of the plans. The company commander's initial guidance for fires is provided in the restated mission produced during mission analysis (step 3 of TLP). Target development begins upon receipt of the mission, is initiated in mission analysis, and continues throughout the operation as targets are confirmed until completion of post execution assessment. Commanders must ensure that fires are integrated fully into their mission planning. The company commander further refines his guidance for fires in his commander's intent and concept of operations.

2-46. A clearly defined concept of operations enables the company commander to articulate precisely how he wants indirect fires to affect the enemy during different phases of the operation. In turn, this allows the FSO to develop a fire support plan that supports accomplishment of the company team's mission. To develop an effective fires plan, the company team FSO must understand the fires planning process and address all the essential elements of a fires plan. (See chapter 7 in this manual for more information on Fires and Indirect Fire Planning.)

Sustainment

2-47. The objective of sustainment in offensive tasks is to assist the commander in maintaining the momentum. The commander should take advantage of windows of opportunity and launch offensive tasks with minimum advance warning time. Therefore, logistics and personnel planners and operators must anticipate these events and maintain the flexibility to support the offensive plan accordingly. A key to successful offensive tasks is the ability to anticipate the requirement to push support forward specifically regarding ammunition, fuel, and water. Sustainment leaders must act, rather than react, to support requirements. The existence of habitual support relationships facilitates the ability to anticipate. To meet sustainment objectives, commanders must consider the following:

- **Logistics.** Sustainment maintains momentum of the attack by delivering supplies as far forward as possible. The commander can use throughput distribution and preplanned and preconfigured packages of essential items to help maintain offensive momentum and tempo.
- **Health Service Support.** The burden on medical resources increases due to the intensity of offensive tasks and the increased distances over which support is required as the force advances. The commander reallocates medical resources as the tactical situation changes.

Protection

2-48. The rapid tempo of offensive tasks poses challenges in the protection of friendly assets. The forward movement of subordinate units is critical if the commander is to maintain the initiative necessary for successful offensive operations. Denying the enemy a chance to plan, prepare, and execute an effective response to friendly offensive tasks through maintaining a high operational tempo is a key means a commander employs to ensure the survivability of his force. Using multiple routes, dispersion, highly mobile forces, piecemeal destruction of isolated enemy forces, scheduled rotation and relief of forces before they culminate, and wise use of terrain are techniques for maintaining a high tempo of offensive operations. The exact techniques employed in a specific situation must reflect the mission variables.

2-49. The commander protects subordinate forces to prevent the enemy from interfering in ongoing operations. That protection meets the commander's legal and moral obligations to the organization's Soldiers. To help protect the force, the commander ensures that all 14 protection tasks are addressed during the unit's

planning, preparation, and execution while constantly assessing the effectiveness of those protection tasks. The 14 protection tasks and systems are—

- Conduct operational area security.
- Employ safety techniques (including fratricide avoidance).
- Implement operations security.
- Implement physical security procedures.
- Provide intelligence support to protection.
- Apply antiterrorism measures.
- Conduct law and order.
- Conduct survivability operations.
- Provide force health protection.
- Conduct chemical, biological, radiological, and nuclear operations.
- Provide explosive ordnance disposal and protection support.
- Coordinate air and missile defense.
- Conduct personnel recovery operations.
- Conduct internment and resettlement.

SEQUENCE OF OFFENSE

2-50. This manual discusses executing all offensive tasks in a five-step sequence. This sequence is for discussion purposes only and is not the only way to conduct offensive operations. The reader should understand that these sequences overlap during the conduct of the offense. Normally the first three steps are shaping operations, while the maneuver step is the decisive operation. Follow through is normally a sequel or branch to the plan based on situation. The sequence of the offense is—

- Gain and maintain enemy contact.
- Disrupt the enemy.
- Fix the enemy.
- Maneuver.
- Follow through.

FORMS OF CONTACT

2-51. In both offensive and defensive operations, contact occurs when a member of the company team encounters a situation that requires a lethal or nonlethal response to the enemy. These situations may entail one or more of the following eight forms of contact:

- Direct.
- Indirect.
- Nonhostile.
- Obstacles.
- CBRN.
- Aerial.
- Visual.
- Electronic warfare.

ACTIONS ON CONTACT

2-52. *Actions on contact* are a series of combat actions often conducted simultaneously that are taken on contact with the enemy to develop the situation (ADRP 3-90). Commanders analyze the enemy throughout TLP to identify likely contact situations that might occur during an operation. Through planning and rehearsals conducted during TLP, they develop and refine courses of actions to deal with the probable enemy actions. The COAs become the foundation for the company team's scheme of maneuver.

FIVE STEPS OF ACTIONS ON CONTACT

2-53. The company team should execute actions on contact using a logical, well-organized process of decision making and action entailing these five steps:

- Deploy and report.
- Evaluate and develop the situation.
- Choose a COA.
- Execute the selected COA.
- Recommend a COA to the higher commander.

(Refer to FM 3-21.8 for more information about actions on contact.)

2-54. This five-step process is not intended to generate a rigid, lockstep response to the enemy. Rather, the goal is to provide an orderly framework that enables the company team and its platoons to survive the initial contact, and then apply sound decision making and timely actions to complete the operation. Ideally, the team acquires the enemy (visual contact) before being seen by the enemy; it then can initiate physical contact on its own terms by executing the designated COA.

2-55. Once the lead elements of a force conducting an MTC encounter the enemy, they conduct actions on contact. The unit treats obstacles like enemy contact, since it assumes that the obstacles are covered by fire. The unit's security force often gains a tactical advantage over an enemy force by using tempo and initiative to conduct these actions on contact, allowing it to gain and maintain contact without becoming decisively engaged. How quickly the unit develops the situation is directly related to its security. This tempo is directly related to the unit's use of well-rehearsed SOPs and drills.

2-56. Commanders must understand that properly executed actions on contact require time at both company team and platoon levels. To fully develop the situation, a platoon or team may have to execute extensive lateral movement; dismount and remount Infantry squads; conduct reconnaissance by fire; or call for and adjust indirect fires. Each of these actions requires time to execute. The commander must balance the time required for subordinate elements to conduct actions on contact with the need of the company team to maintain momentum. In terms of slowing the tempo of an operation, however, the loss of a platoon or team is usually more costly than the additional time required to allow the subordinate element to properly develop the situation.

Deploy and Report

2-57. If the commander expects contact (based on reports on the CAB Command Net, enemy symbols on his FBCB2 screen, or through his own reconnaissance), he will already have deployed the company team by transitioning to the bounding overwatch movement technique. If the team is alert to the likely presence of the enemy, it has a better chance of establishing first visual contact and then physical contact on its own terms. Contact, either visual or physical, usually is made by an overwatching or bounding platoon, which initiates the team's actions on contact. In a worst-case scenario, a previously undetected (but expected) enemy element may engage the platoon. The platoon in contact would conduct a battle drill for its own survival and then initiate actions on contact.

2-58. In some cases, the company team makes unexpected contact with the enemy while using traveling or traveling overwatch. The element in contact or, if necessary, the entire company team may have to deploy using battle drills to survive the initial contact. When making unexpected contact, the platoon in contact sends a contact report immediately to the CAB. The company teams and platoons develop SOPs that harness the capabilities of FBCB2 while destroying the enemy force and protecting the company.

Evaluate and Develop Situation

2-59. While the company team deploys, the commander evaluates the situation and continues to develop it. The commander quickly gathers as much information as possible, either visually or, more often, through reports of the platoon(s) in contact. He analyzes the information to determine critical operational considerations, including the following:

- Size of the enemy element.
- Location, composition, activity, and orientation of the enemy force.

- Impact of obstacles and terrain.
- Enemy capabilities (especially antiarmor capability).
- Probable enemy intentions.
- How to gain positional advantage over the enemy.
- The friendly situation (location, strength, and capabilities).
- Possible friendly COAs to achieve the specified end state.

2-60. Once the commander determines the size of the enemy force the company team has encountered, he sends a report to the CAB. However, after evaluating the situation, the commander may discover that he does not have enough information to identify the necessary operational considerations. To make this determination, he further develops the situation according to the CAB commander's intent, using a combination of these techniques:

- Surveillance (using binoculars and other optical aids).
- Mounted or dismounted maneuver (includes lateral maneuver to gain additional information by viewing the enemy from another perspective).
- Indirect fire.
- Reconnaissance by fire.

Choose Course of Action

2-61. After developing the situation and determining that he has enough information to make a decision, the company commander selects a COA that both meets the requirements of the CAB commander's intent and is within the company team's capabilities.

Execute Selected Course of Action

2-62. In executing a COA, the company team transitions to maneuver. It then continues to maneuver throughout execution, either as part of a tactical task or to advance while in contact to reach the point on the battlefield from which it executes its tactical task. The team can employ many tactical tasks as COAs, any of which may be preceded or followed by additional maneuver. These tasks include—

- Attack by fire
- Breach
- Bypass
- Clear.
- Control
- Counterreconnaissance
- Disengagement
- Exfiltrate
- Follow and assume
- Follow and support
- Occupy
- Retain
- Secure
- Seize
- Support by fire

2-63. As execution continues, more information becomes available to the company commander. Based on the emerging details of the enemy situation, the commander may have to alter his COA during execution. For example, as the company team maneuvers to destroy what appears to be a tank platoon, it discovers two additional platoons in prepared positions. The commander analyzes and develops the new situation. He then selects an alternate COA, such as establishing a support by fire position to support another company team's maneuver against the newly discovered enemy force.

Recommend Course of Action to Higher Commander

2-64. Once the company commander selects a COA, keeping in mind the commander's intent, he informs the higher commander, who has the option of disapproving it based on its impact on the overall mission. To avoid delay, unit SOPs may provide automatic approval of certain actions.

SECTION II – MOVEMENT TO CONTACT

2-65. Movement to contact is an offensive task designed to develop the situation and establish or regain contact It ends when units make contact. When necessary, company teams can conduct this task regardless of which element in the decisive action is currently predominant—offense, defense, or stability. The company team usually conducts a MTC as part of a CAB or larger element. However, based on mission variables, the company team may conduct the operation independently. A MTC includes both search and attack and cordon and search techniques.

CONDUCT MOVEMENT TO CONTACT

2-66. Purposeful and aggressive movement, decentralized control, and the hasty deployment of combined arms formations from march to conduct offensive, defensive, or stability tasks characterize the conduct of a MTC. The fundamentals of a MTC are as follows:

- Focus all efforts on finding the enemy.
- Make initial contact with the smallest force possible, consistent with protecting the force.
- Make initial contact with small, mobile, self-contained forces to avoid decisive engagement of the main body on ground chosen by the enemy, which allows the commander maximum flexibility to develop the situation.
- Task-organize forces and use movement formations to deploy and attack rapidly in any direction.
- Keep subordinate forces within supporting distance to facilitate a flexible response.
- Maintain contact regardless of the COA adopted once contact is gained.

ORGANIZATION OF FORCES

2-67. A MTC is organized with a forward security force and a main body as a minimum. The company commander may task-organize his combat power by assigning one platoon as the forward security force, while his remaining combat power is the main body (see figure 2-6 on page 2-17). Based on the commander's analysis and mission variables, he may assign additional assets, such as engineers, to the forward security forces or the main body.

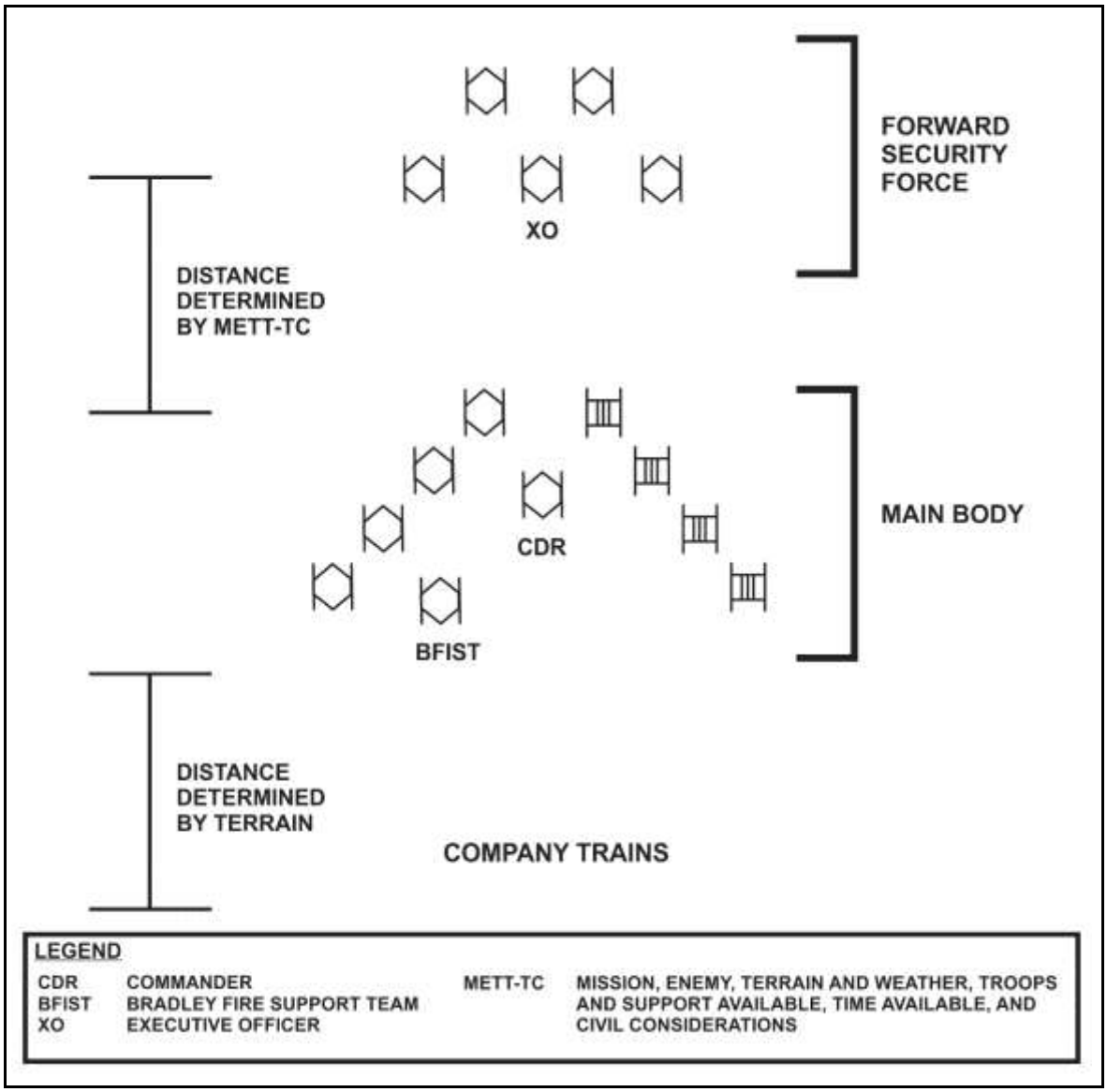

Figure 2-6. Company team MTC

Security Forces

2-68. The security force moves as quickly and aggressively as possible, but remains within supporting range of the main body's weapon systems. It is essential to provide early warning and reaction time for the company team. It destroys small enemy forces or causes the enemy to withdraw before they can disrupt the main body. The composition depends on mission variables. In open terrain, it may move mounted; in restricted, close, complex, or urban terrain, it may move dismounted, with vehicles in the overwatch. Engineers or additional tank or mechanized Infantry platoons may be attached to or follow the security force. The entire armored or mechanized Infantry company team may constitute all or part of the security force for a larger echelon, such as a combined arms battalion or Armored brigade combat team.

Main Body

2-69. The combat elements of the main body are prepared to deploy and maneuver rapidly to a decisive point on the battlefield to destroy the enemy. The main body keys its movement to the forward security force, while

providing responsive support when contact is made. It maintains information of the security force's activities via frequency modulation crosstalk or digital communication, primarily FBCB2.

2-70. Standard formations and battle drills allow the commander, based on the information available, to shift combat power rapidly on the battlefield. It allows elements from the main body to relieve the security force from tasks, such as observing bypassed enemy or clearing routes. This prevents the security force from being diverted from their primary mission.

CONTROL MEASURES

2-71. The operation usually starts from an LD at the time specified in the OPORD. The commander controls the MTC by using phase lines, contact points, and checkpoints as required. He controls the depth of the MTC by using a limit of advance or a forward boundary. The commander could designate one or more objectives to limit the extent of the MTC and orient the force. However, these are often terrain-oriented and used only to guide movement. Although a MTC may result in taking a terrain objective, the primary focus should be the enemy force. If the commander has enough information to locate significant enemy forces, he should plan another type of offensive operation.

2-72. The commander can designate a series of phase lines that can successively become the new rear boundary of the forward security elements as that force advances. Each rear boundary becomes the forward boundary of the main body and shifts as the security force moves forward.

PLANNING MOVEMENT TO CONTACT

2-73. Even applying all of the warfighting functions, a MTC is one of the most difficult missions to plan. The goal is to prevent a meeting engagement with the enemy. Planning must allow for flexibility and promote subordinate initiative. Planning begins by developing the concept of the operation with a focus on ultimate control of the objective and conducting a reverse planning sequence from the objective to the LD. This is accomplished by issuing a clear commander's intent and developing both a simple concept of operations and a series of decision points to execute likely maneuver options.

2-74. For example, the company team may conduct a MTC before occupation of a screen line. In spite of the fielding of improved technologies and platforms equipped with networked communications, factors such as complex terrain, weather, enemy electronic warfare (EW), computer network operations, and military deception require the company team to conduct a MTC to develop the situation.

PREPARING FOR MOVEMENT TO CONTACT

2-75. The preparations for a movement to contact include actions on contact and battle drills. Contact occurs when a member of the company team encounters a situation that requires a response to the enemy. The company team should execute actions on contact using a logical, well-organized process of decision making and action.

EXECUTING MOVEMENT TO CONTACT

2-76. Each element of the force synchronizes its actions with adjacent and supporting units, maintaining contact and coordination as prescribed in orders and unit SOPs. Early identification of enemy reactions is essential for the echelon to maintain momentum and initiative during the attack.

Gain and Maintain Enemy Contact

2-77. The commander uses all available sources of combat information to find the enemy's location and dispositions, which ensures that he can commit forces under optimal conditions. The optimal conditions could be making and maintaining contact with the smallest element possible. This allows the commander to develop the situation before committing the main body.

Disrupt Enemy

2-78. Once contact is made, the main body brings overwhelming fires onto the enemy to prevent them from conducting either a spoiling attack or organizing a coherent defense. The security force maneuvers as quickly as possible to find gaps in the enemy's defenses. The commander gathers as much information as possible about the enemy's dispositions, strengths, capabilities, and intentions. As more intelligence becomes

available, the main body attacks to destroy or disrupt enemy command and control centers, fire control nodes, and communication nets.

Fix Enemy

2-79. The commander initiates maneuver at a tempo the enemy cannot match, since success in a meeting engagement depends on effective actions on contact. The security force does not allow the enemy to maneuver against the main body. The organization, size, and combat power of the security force are the major factors that determine the size of the enemy force it can defeat without deploying the main body. The techniques a commander employs to fix the enemy when both forces are moving are different than those employed when the enemy force is stationary during the meeting engagement. In both situations, when the security force cannot overrun the enemy by conducting a hasty frontal attack, he must deploy a portion of the main body. When this occurs the unit is no longer conducting a MTC but an attack.

Maneuver

2-80. If the security force cannot overrun the enemy with a frontal attack, the commander quickly maneuvers his main body to conduct a penetration, flank attack, or envelopment. He does this to overwhelm the enemy before it can react effectively or reinforce. The commander attempts to defeat the enemy in detail while still maintaining the momentum of his advance. After a successful attack, the commander resumes the MTC. If he did not defeat the enemy, he has three main options: bypass, transition to a more deliberate attack, or conduct a defense.

2-81. Main body elements deploy rapidly to the vicinity of the contact if the commander initiates a frontal attack. He avoids piecemeal commitment except when rapidity of action is essential and combat superiority at the vital point is present and can be maintained throughout the attack, or when compartmentalized terrain forces a COA. When conducting an envelopment, the commander focuses on attacking the enemy's flanks and rear before he counters these actions. The commander uses the security force to fix the enemy while the main body looks for an assailable flank, or he uses the main body to fix the enemy while the security force finds the assailable flank.

Follow Through

2-82. If the enemy is defeated, the unit transitions back into a MTC and continues to advance. The MTC terminates when the unit reaches the final objective or limit of advance or it transitions to a more deliberate attack, a defense, or retrograde.

SEARCH AND ATTACK

2-83. Search and attack is a technique for conducting a MTC that shares many of the same characteristics of an area security mission. Conducted primarily by Infantry forces and often supported by mechanized and armored forces, the commander employs this MTC when the enemy is operating as a small, dispersed element, or when the task is to deny the enemy the ability to move within a given area. Maneuver battalions and companies normally conduct search and attack operations. The commander conducts a search and attack for one or more of the following purposes:

- **Protect the force.** Prevent the enemy from massing to disrupt or destroy friendly military or civilian operations, equipment, property, and key facilities.
- **Collect information.** Gain information about the enemy and the terrain to confirm the enemy COA predicted by the IPB process. Help generate situational awareness (SA) for the company and higher headquarters.
- **Destroy the enemy.** Render enemy units in the AO combat ineffective.
- **Deny the area.** Prevent the enemy from operating unhindered in any area he is using for a base camp or for logistics support.

ORGANIZE FORCES FOR SEARCH AND ATTACK

2-84. The commander task-organizes the unit into reconnaissance, fixing, and finishing forces, each with a specific purpose and task. The size of the reconnaissance force is based on the available intelligence about the size of enemy forces in the AO. The nature of the OE sometimes requires an Armor and mechanized Infantry company team to conduct a search and attack while operating in a noncontiguous AO.

2-85. The reconnaissance force conducts a zone reconnaissance to reconnoiter identified named area of interest. The reconnaissance force must be small enough to achieve stealth but large enough to provide adequate self-defense until fixing and finishing forces arrive.

2-86. The fixing force can be a combination of mounted and dismounted company teams with enough combat power to isolate the enemy once the reconnaissance force finds them. The fixing force attacks if that action meets the commander's intent, and it can generate sufficient combat power against the detected enemy.

2-87. The finishing force destroys the detected and fixed enemy. The commander may have his finishing force establish an area ambush and use reconnaissance and fixing forces to drive the enemy into ambushes. The finishing force must have enough combat power to destroy those enemy forces expected in the company team AO.

CONTROL MEASURES FOR SEARCH AND ATTACK

2-88. The commander establishes control measures that allow for decentralized actions and small-unit initiative to the greatest extent possible. The minimum control measures for a search and attack are an AO, TRPs, objectives, checkpoints, and contact points. Target reference points facilitate responsive fire support once the reconnaissance force makes contact with the enemy. The commander uses objectives and checkpoints to guide the movement of subordinate elements. Coordination points indicate a specific location for coordinating fires and movement between adjacent units. The commander uses other control measures, such as phase lines, as needed.

PLAN SEARCH AND ATTACK

2-89. The search and attack plan places the finishing force, as the decisive operation, where it can best maneuver to destroy enemy forces or essential facilities once located by reconnaissance assets. Typically, the finishing force occupies a central location in the AO. However, mission variables may allow the commander to position the finishing force outside the search and attack area. The commander weighs the decisive operation by using priority of fires and assigning priorities of support to available combat multipliers (such as engineer elements and rotary-wing lift support). The commander establishes control measures, as necessary, to consolidate units and concentrates the combat power of the force before the attack. Once the reconnaissance force locates the enemy, the fixing and finishing forces can fix and destroy the detected enemy force. The commander develops a contingency plan if the reconnaissance force is compromised.

EXECUTE SEARCH AND ATTACK

2-90. Each subordinate element operating in its own AO is tasked to destroy the enemy within its capability. The commander should have in place previously established control measures and communications means between any closing elements to prevent fratricide. The reconnaissance force conducts a zone reconnaissance to reconnoiter identified named area of interest. This section discusses executing a search and attack using the sequence of the offense.

Gain and Maintain Enemy Contact

2-91. Once the reconnaissance force finds the enemy force, the fixing force develops the situation and executes one of two options based on the commander's guidance and mission variables. The first option is to block identified routes that the detected enemy can use to escape or for reinforcements. The fixing force maintains contact with the enemy and positions its forces to isolate and fix the enemy before the finishing force attacks. The second option is to conduct an attack to fix the enemy in their current positions until the finishing force arrives. Depending on the enemy's mobility and the likelihood of the reconnaissance force being compromised, the commander may need to position the fixing force before the reconnaissance force enters the AO.

Disrupt Enemy

2-92. The commander uses the finishing force to conduct attacks, maneuvering to block enemy escape routes while another element conducts the attack or employs indirect fire, CAS or close combat attack (CCA) to destroy the enemy.

Fix Enemy

2-93. If conditions are not right to use the finishing force to attack the detected enemy, the reconnaissance or fixing force can continue to conduct reconnaissance and surveillance activities to further develop the situation. Whenever this occurs, the force maintaining surveillance must be careful to avoid detection and possible enemy ambushes.

Maneuver

2-94. The finishing force may move behind the reconnaissance and fixing forces, or it may locate at a pickup zone (PZ) and air assault into a landing zone (LZ) near the enemy once they are located. The finishing force must be responsive enough to engage the enemy before they can break contact with the reconnaissance force or fixing force. The commander may have the finishing force establish an area ambush and use the reconnaissance and fixing forces to drive the enemy into ambushes.

Follow Through

2-95. After a successful search and attack, the commander transitions to the appropriate task: deliberate attack, defense, or retrograde for the existing tactical situation.

CORDON AND SEARCH

2-96. A cordon and search involves two potentially inflammatory processes—limiting freedom of movement and searching dwellings. These two actions provide a clear potential for negative consequences; therefore, organizing cordon and search elements requires extensive mission tailoring. Commanders must always be prepared for a civil disturbance. (Refer to ATP 3-06.20 for more information.)

2-97. Searches are an important aspect of populace and resource control. The need to conduct search operations or to employ search procedures is a continuous requirement. A search can orient on people, materials, buildings, or terrain. A search usually involves both civil police and Soldiers.

ORGANIZE FORCES FOR CORDON AND SEARCH

2-98. Cordon and search operations involve isolating the target area and searching suspected building to capture or destroy possible insurgents or contraband. It involves the emplacement of a cordon, or security perimeter, to prevent traffic in and out of the area. The cordon permits the search element to operate unimpeded within the secure area. The purpose of the cordon and search is to obtain or destroy weapon caches, material or information, persons of interest, or a specific high-value target. The organization of forces for a cordon and search includes four elements: command, security, search, and assault and support force.

Command Element

2-99. The command element is the headquarters that executes mission command for the cordon and search mission and may have several combat enablers attached. Frequently, a commander is given a variety of assets to assist in accomplishing the mission. Ideally, the commander organizes his assets to maintain control of no more than three-to-five elements.

2-100. The location of the command element must provide the ability to control the subordinate teams and supporting assets of the cordon and search mission. The ability to observe the search or assault element generally causes the command element to collocate with the inner cordon. Visibility and communication capability are deciding factors in identifying the best location for the command element during the actual mission.

2-101. The composition of the command element may be as small as the commander and the radio operator or may include security vehicles, interpreters, host nation (HN) officials or local authorities. The command element must remain mobile and able to move to any point within the cordon and search operation to ensure coordination of all elements and supporting assets. When HN forces or authorities are involved in the operation, the command element coordinates with and integrates them as identified during the planning phase of the operation. Operation and communication security must be guiding principles when conducting integrated operations with HN forces.

2-102. The command element is the single point of coordination for supporting assets and for status reporting to higher headquarters. As a critical component of the cordon and search operation, the command element designates a backup team in the event it becomes combat ineffective. The command element ensures that all actions are documented as required and that the rules of evidence are followed when necessary. If a person is detained, the command element monitors the documentation, security, and transportation of the detainee. The command element ensures that damages caused during the cordon and search operation are documented to identify legitimate future claims by the occupants of the targeted area.

Security Element

2-103. The security element is responsible for total isolation of the target area. The security element limits enemy or civilian influence in the objective area and prevents targets from escaping the cordon. The security element may include—

- Vehicle-mounted sections or platoons.
- Interpreter(s).
- Detainee teams.
- Crowd-control teams.
- Observation posts (OPs).
- Traffic control points or blocking positions.
- HN security force (military or police).
- Integrated aviation assets.
- Dismounted squads or platoons.
- Female search teams.

2-104. The security element is normally divided into two separate group: the outer and the inner cordon: The outer cordon prevents anyone from entering or escaping the objective area. Possible tasks are—

- Block.
- Interdict.

2-105. The inner cordon accomplishes a similar task as the outer but only for a specific area as in a block, building, or a portion of a building. It isolates a specific area where a target is located. Possible tasks are—

- Fix.
- Isolate.
- Block.
- Interdict.
- Neutralize.
- Suppress.

SEARCH OR ASSAULT ELEMENT

2-106. The search or assault element's mission is to clear, search, and assault targets within the specific building or area where the targets are located and to capture, kill, or destroy the targeted individuals or materials. The search or assault element initiates action once the outer and inner cordons are in place. The element accomplishes its mission by gaining a foothold on or in the target to clear all enemy and noncombatant personnel, and by conducting a systematic search of the target. These areas may be searched selectively (only specific rooms/buildings/blocks) or systematically (everything within a given area). Due to split-second decisions that have to be made, this element must not only understand but follow ROE in a dynamic environment.

2-107. The search or assault element may be task-organized into four teams—assault, search, security, and support—to accomplish its mission. All teams must understand and be prepared to assume the role of the other teams in the search or assault element.

SUPPORT ELEMENT

2-108. The support element reinforces, and is capable of accomplishing, the task and purpose of the unit's main effort. The commander may direct the support element to accomplish priority planning tasks. This

means that the support element leader must be intimately familiar with all aspects of the cordon and search mission from planning through completion.

2-109. The commander identifies tasks the support element may be required to execute. These tasks must be prioritized and given to the support element leader so he can plan and rehearse these actions according to the commander's plan. Probable tasks assigned to the support element during a cordon and search operation include—

- Reinforce outer/inner cordon.
- Clear buildings.
- Search buildings.
- Secure, safeguard, and escort civilians or detainees.
- Secure and safeguard captured material or equipment.
- Medical response/support, as needed.
- Biometric data collection teams.

2-110. Commitment criteria is a guide to help the commander decide when to commit the support element; however, it is not intended to be a trigger for employment. Possible commitment criteria include—

- Hostile crowd forming around inner cordon.
- Loss of main effort.
- Numerous rooms in building being searched.
- More than a specified number of detainees.
- Enemy engages inner cordon.

Control Measures for Cordon and Search

2-111. Standard tactical control measures provide effective mission command over approaching forces; they are used to conduct cordon and search operations. Standard tactical control measures include—

- Assembly areas (Aas).
- Checkpoints.
- Rally points.
- Phase lines.

PLANNING CORDON AND SEARCH

2-112. Commanders must consider numerous factors when planning and preparing for a cordon and search operation. Commanders should apply the same steps that are used in TLP to apply the warfighting functions as discussed in Chapter 1, Section II. When the objective of the cordon and search operation is a high-priority target, the planning time can be extremely limited. It can occur when a company team first receives the mission from higher headquarters, when it is actually executed, or at any time between.

2-113. Given the complexity of the mission and the many assets task-organized to support the operation, planning time may require immediate collaborative efforts by key leaders of all elements and accelerated TLP. As always, the quality of information associated with mission variables is critical. Commanders should ask, "What is the focus of our planning?" In particular, the "civilian" part of mission variables should be specifically considered.

2-114. An effective cordon is critical to the success of the search effort. Cordons are designed to prevent persons of interest from escaping, prevent insurgents from reinforcing, and protect forces conducting the operation. Based on mission variables, the company team can establish an inner cordon and an outer cordon. The Armor and mechanized Infantry company team is best suited to provide the outer cordon given its mobility and armaments. Both cordon elements must focus inward and outward for security purposes.

2-115. The outer cordon's composition and capabilities should be based on mission variables. The mission of the outer cordon is to provide containment to prevent the enemy from escaping the objective area. The outer cordon may have to accomplish this task by being more terrain oriented to focus on the most probable avenues of approach into and out of the objective area. The outer cordon can be tasked to block specific locations to prevent escape from inside and interference from outside of the objective area.

2-116. The mission of the inner cordon is to contain the immediate vicinity of the target to prevent escape and provide security to the search or assault element. If the cordon and search is opposed by a hostile force, the inner cordon provides support by fire. The inner cordon provides direct fires to suppress the enemy force and allows maneuver of the search or assault element to the objective. Due to the congested nature of the urban environment, direct fire control measures can be complicated. One proven tactics, techniques, and procedures is for the unit to number buildings, letter building corners, and floors. This way a request for immediate direct fire suppression can be specific and the risk of both collateral damage and fratricide are reduced. (See figure 2-7, which shows how to establish a cordon.)

PREPARE CORDON AND SEARCH

2-117. Rehearsals are the key component of a cordon and search. Leaders use rehearsals to ensure all elements understand the concept of operations and his intent. The rehearsal allows the company to practice essential tasks. Effective rehearsals imprint a mental picture of how the sequence of the cordon and search will be conducted. It improves the mutual understanding and coordination between elements.

2-118. The extent of the rehearsals depends on the time available, under time constrained conditions, leaders conduct abbreviated rehearsals that focus on critical events. Rehearsals should be conducted at the lowest level possible.

EXECUTE CORDON AND SEARCH

2-119. Cordon and search operations involve isolating the target area and searching suspected buildings to capture or destroy possible insurgents or contraband.

2-120. The security element sets up the cordon, which usually involves two groups: an outer cordon "ring" for vehicular avenues of approach and an inner cordon "ring" for personnel avenues of approach. Generally, the outer cordon ring unit may consist of antitank (AT) or heavy weapons vehicles (tube launched, optically tracked, wire guided (missile) [TOWs], high mobility multipurpose wheeled vehicles, M-1 tanks, Bradley fighting vehicles, light armored vehicles, Stryker vehicles, or helicopters).

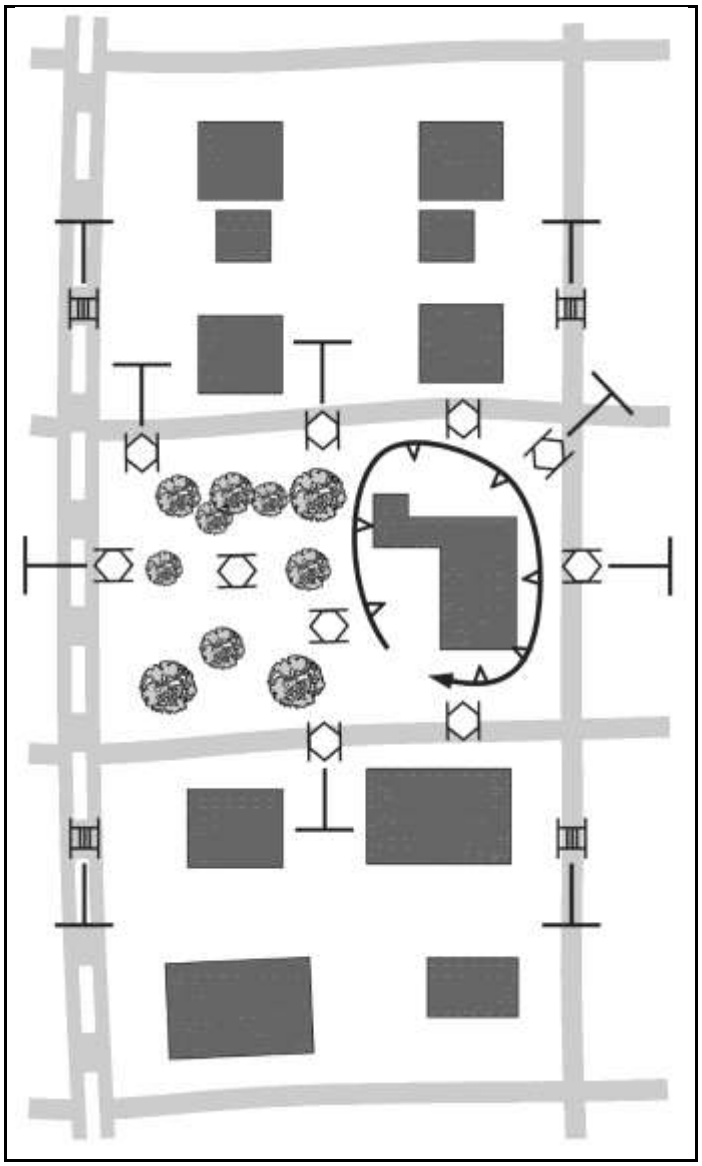

Figure 2-7. Establish a cordon

2-121. Key tips for cordon and search success include the following:

- Position key leaders so that they can see and control all subordinate elements. Do not let them get preoccupied with subordinate leader responsibilities.
- Position key capabilities and enablers, such as crew-served weapons and interpreters at the critical locations.
- Be prepared to move leadership and support elements from one location to another during mission execution or as needed.
- When executing searches, position vehicles and personnel to be searched so that the security element's sectors of fire face to the outside of the friendly element and away from noncombatants.
- Keep the bulk of the forces within the perimeter so that if the situation escalates they are essentially in a battle or support-by-fire position.
- Ensure that all personnel understand the direct fire plan as well as any contingency plans. For example, they should know the following:

- What actions to take in the event a vehicle or person penetrates a traffic control point from outside the established perimeter.
- Who engages and with what weapons systems.
- Whether crew-served weapons or only M-16s/M-4s are engaged.
- Primary and alternate signals to lift or shift fire.

SECTION III – ATTACK

2-122. An attack is an offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both. Attacks may be hasty or deliberate, depending on the time available for assessing the situation, planning, and preparing. When the commander decides to attack or the opportunity to attack occurs during combat operations, the execution of that attack must mass the effects of overwhelming combat power against selected portions of the enemy force with a tempo and intensity that cannot be matched by the enemy. The resulting combat should not be a contest between near equals. Attackers must be determined to seek decision on the ground of their choosing through the deliberate synchronization and employment of the combined arms team.

2-123. Most attacks take place by fragmentary orders that direct the execution of rapidly executed battle drills by forces immediately available. They can include published orders, a detailed knowledge of all aspects of enemy dispositions, a force that has been task organized specifically for the operation, and the conduct of extensive rehearsals.

ORGANIZE FORCES

2-124. Once a commander determines the scheme of maneuver, he organizes his forces to ensure enough combat power to accomplish the mission. The commander normally organizes into a security force, a main body, and a reserve.

SECURITY FORCES

2-125. A commander resources dedicated security forces during an attack only if the attack will uncover one or more flanks or the rear of the attacking force as it advances. Normally, an attacking unit does not need extensive forward security forces. Most attacks are launched from positions in contact with the enemy, which reduces the usefulness of a separate forward security force. The exception occurs when the attacking unit is transitioning from the defense to an attack and had previously established a security area as part of the defense.

MAIN BODY

2-126. The commander organizes the main body to conduct the decisive operation and necessary shaping operations. The commander aims the decisive operation toward the immediate destruction of the enemy force, its will to resist, seizure of a terrain objective, or the defeat of the enemy's plan. The maneuver scheme identifies the focus of the decisive operation. All of the force's available resources operate in concert to assure the success of the decisive operation. The element designated to conduct the decisive operation can change during the course of the attack. The commander must consider an assault, breach, and support force if the commander expects to conduct a breach operation during the attack.

RESERVE

2-127. The commander uses the reserve to exploit success, defeat enemy counterattacks, or restore momentum to a stalled attack. Once committed, the reserve's actions normally become or reinforce the echelon's decisive operation. The commander makes every effort to reconstitute another reserve from platoons made available by the revised situation. Often a commander's most difficult and important decision concerns the time, place, and circumstances for committing the reserve. The reserve is not a committed force; it is not used as a follow-and-support force or a follow-and-assume force.

2-128. In the attack, the combat power allocated to the reserve depends primarily on the level of uncertainty about the enemy, especially the strength of any expected enemy counterattacks. The commander only needs to resource a small reserve to respond to unanticipated enemy reactions when detailed information about the

enemy exists. When the situation is relatively clear and enemy capabilities are limited, the reserve may consist of a small fraction of the force. When the situation is vague, the reserve may initially contain the majority of the commander's combat power.

CONTROL MEASURES FOR AN ATTACK

2-129. Units conducting offensive tasks are assigned an AO within which to operate. Within that area, the commander normally designates the following control measures whether or not the attack takes place in a contiguous or noncontiguous environment:

- Applicable graphic control measures.
- Phase line as the LD, which may be the line of contact.
- Time to initiate the operation.
- Objective.

2-130. A commander can use any other control measures necessary to control the attack. Short of the LD/line of contact, the commander may designate Aas and attack positions where the unit prepares for offensive tasks or waits for the establishment of the required conditions to initiate the attack. Beyond the LD/line of contact the commander may designate checkpoints, phase lines, probable line of deployment (PLD), assault positions, and direct and indirect fire support coordinating measures. Between the PLD and the objective a final coordination line, assault positions, support-by-fire and attack-by-fire positions, and time of assault to further control the final stage of the attack can be used (see Chapter 6 of this manual for more information on direct fire control measures). Beyond the objective the commander can impose an limit of advance if he does not want the unit to conduct exploitation or a pursuit.

PLAN ATTACK

2-131. In an attack, the company team attempts to place the enemy in a position where the enemy can easily be defeated or destroyed. The commander seeks to keep the enemy off-balance while continually reducing the enemy's options. In an attack the commander focuses maneuver effects, supported by the other warfighting functions, on those enemy forces that seek to prevent the unit from accomplishing its mission and seizing its objective. Planning helps the commander synchronize the effects of combat power through TLP.

MISSION COMMAND

2-132. The commander states the desired effect of fires on the enemy weapon systems, such as suppression or destruction, as part of his planning process. The commander assigns subordinate units their missions and imposes those control measures necessary to synchronize and maintain control over the operation.

2-133. Using the enemy situational and weapons templates previously developed, the commander determines the probable line of contact and enemy trigger lines. As the commander arrays his elements to shape the battlefield, friendly weapon systems are matched against the enemy's to determine the PLD. Once the commander determines the PLD, he establishes how long it takes subordinates to move from the LD to the PLD and any support-by-fire positions the attack requires. The commander establishes when and where the force must maneuver into enemy direct-fire range.

2-134. Besides accomplishing the mission, every attack plan must contain provisions for exploiting success or any advantages that may arise during the operation. The commander exploits success by aggressively executing the plan, promoting subordinate leader initiative, and using units that can rapidly execute battle drills.

2-135. Maintaining signal communications during an attack can be challenging at all levels of the company/team. The commander should consider the following:

- Maintaining communications over large distances.
- Working with different types of units (Infantry, Armor, Engineer, Field Artillery)
- Challenges dealing with enemy effects EW.

MOVEMENT AND MANEUVER

2-136. In the plan of attack, the commander attempts to surprise the enemy by choosing an unexpected direction, time, type, or strength for the attack. Surprise delays enemy reactions, overloads and confuses enemy command and control, induces psychological shock in the enemy, and reduces the coherence of the enemy defense. The commander achieves tactical surprise by attacking in bad weather and over seemingly impassible terrain, conducting feints and demonstrations, maintaining a high tempo, destroying enemy forces, and employing sound operation security (OPSEC).

2-137. The commander may plan different attack times for decisive and shaping operations to mislead the enemy and allow the shifting of supporting fires to successive attacking echelons. However, simultaneous attacks provide a means to maximize the effects of mass in the initial assault. They prevent the enemy from concentrating defensive fires against successive attacks.

2-138. In the planning process, the commander and leaders focus on the routes, formations, and navigational aids they will use to traverse from the LD or PLD to the objective. Some terrain locations may require the attacking unit to change its combat formation, direction of movement, or movement technique when it reaches those locations. The company can post guides at these critical locations to maintain control over the movement.

INTELLIGENCE

2-139. The commander takes every opportunity to gain and refine combat information regarding the enemy. To employ proper capabilities and tactics, the commander must have detailed knowledge of the enemy's organization, equipment, and tactics. The commander must understand the enemy's strengths and weaknesses.

2-140. Before the attack, the company needs to ascertain information that should include—

- Location and depth of enemy reserves.
- Location of the enemy's antiarmor systems.
- Location and extent of contaminated areas.
- Location and extent of obstacles, possible breach sites, and enemy EAs.
- Location of areas where attacking units could become disoriented, such as rough or restrictive terrain.
- Most favorable routes of approach to the attack objective.
- Areas that the attacker can use for flanking fire and maneuver, such as support-by-fire and attack-by-fire positions.
- Suitability of planned friendly assault, support, artillery, and sustainment support positions.
- Enemy deception operations.

2-141. Commanders and leaders at all echelons personally participate in this process. If the commander does not have timely and accurate intelligence and does not know where the majority of enemy units and systems are located, he cannot conduct an attack. The attacking unit must conduct a MTC, or collect more combat information.

FIRES

2-142. The commander, along with the fire support officer, synchronizes the company's maneuver with the provision of fire support. It must identify critical times and places where the commander needs the maximum effects from fire-support assets. The commander combines maneuver with fires to mass effects, achieve surprise, destroy enemy forces, and obtain decisive results. (See chapter 7 in this manual for more information on Fires and Indirect Fire Planning.)

2-143. The goal of the commander's attack criteria is to focus fires on seizing the initiative. The commander emphasizes simple and rapidly integrated fire support plans. He does this with quick-fire planning techniques and good SOPs. The commander integrates fire assets as far forward as possible in the movement formation to facilitate early emplacement. Fires concentrate (mass) on forward enemy elements to enable maneuver efforts to close with the enemy positions.

SUSTAINMENT

2-144. The commander must plan, along with the XO and 1SG, to provide sustainment, ensure freedom of action, extend operational reach, and prolong endurance. Sustainment is the provision of the logistics, personnel services, and health services support necessary to maintain operations until mission accomplishment.

PROTECTION

2-145. Protection facilitates the commander's ability to maintain the force's integrity and combat power. Protection determines the degree to which potential threats can disrupt operations and counters or mitigates those threats. Emphasis on protection increases during preparation and continues throughout execution. Protection is a continuing activity; it integrates capabilities to safeguard bases, secure routes, and protect forces.

PREPARE FOR AN ATTACK

2-146. Even in fluid situations, attacks are best organized and coordinated in Aas. If the commander decides that rapid action is essential to retain a tactical advantage, he may opt not to use an AA. Detailed advance planning—combined with digital communications, SOPs, and battle drills—may reduce negative impacts of such a decision.

2-147. Unless already in an AA, the company moves into one during the preparation phase. The company moves with as much secrecy as possible, normally at night and along routes that prevent or degrade the enemy's capabilities to visually observe or otherwise detect the movement. It avoids congesting its AA and occupies it for the minimum possible time. While in the AA, each element is responsible for its protection activities (such as local ground security).

2-148. The leaders should continue its TLP and priorities of work to the extent the situation and mission allow before moving to attack positions. These preparations include but are not limited to—

- Protecting the force.
- Conducting task organization.
- Performing reconnaissance.
- Refining the plan.
- Briefing the troops.
- Conducting rehearsals, to include test firing of weapons.
- Moving sustainment and Army Health System (AHS) forward.
- Promoting adequate rest for both leaders and Soldiers.
- Positioning the force for subsequent action.

2-149. The commander exercises and refines the maneuver and fire plans during rehearsals, which are an important part of ensuring the plan's coordination and synchronization. As part of the rehearsal process, the commander reviews the anticipated actions with leaders to ensure all understand the plan, the relationship between fire and movement, and the synchronization of critical events. These critical events include:

- Moving from the AA to the LD.
- Maneuvering from the LD to the PLD.
- Occupying support-by-fire positions.
- Conducting the breach.
- Assaulting the objective.
- Consolidating on the objective.
- Exploiting success or pursuing a withdrawing enemy.
- Actions of echelon reserves.

2-150. The unit should conduct rehearsals under as many types of adverse conditions as possible with time and other restraints to identify and prepare the unit to cope with problems. At the platoon, the rehearsal includes battle drills, such as creating lanes through minefields.

2-151. As part of TLP, leaders at all levels should conduct a personal reconnaissance of the actual terrain when it will not compromise OPSEC or result in excessive risk to unit leadership. Modern information systems can enable leaders to conduct a virtual reconnaissance when a physical reconnaissance is not practical. If a limited-visibility attack is planned, they should reconnoiter the terrain at night.

EXECUTE ATTACK

2-152. A series of advances and assaults by attacking units until they secure the final objective characterizes the attack. The company moves as quickly as possible, following reconnaissance elements or successful probes through gaps in the enemy's defenses. They shift their strength to reinforce success and carry the battle deep into the enemy's rear. The commander does not delay the attack to preserve the alignment of subordinate elements or to adhere closely to the preconceived plan of attack.

Gain and Maintain Enemy Contact

2-153. Gaining and maintaining contact with an enemy determined to break that contact is vital to the success of offensive tasks. A defending enemy generally establishes a security area around their forces to make early contact with attacking forces. This determines their capabilities, intent, and chosen COA and delays their approach. The enemy uses their security area to strip away friendly reconnaissance forces and hide their dispositions, capabilities, and intent. Their goal is to compel the attacking force to conduct a MTC against their forces who know the exact location of the attacking forces.

Disrupt Enemy

2-154. Disrupting one or more parts of the enemy weakens their entire force and allows the friendly commander to attack the remaining enemy force in an asymmetrical manner. The assessment and decisions regarding what to disrupt, when to disrupt, and to what end are critical.

2-155. Once any form of contact is made with the enemy, the commander uses the element of surprise to conduct shaping operations that strike at the enemy. The element of surprise disrupts the enemy's combined arms team and ability to plan and control their forces. Once this disruption process begins, it continues throughout the attack.

2-156. The commander uses existing technological advantages over the enemy to aid the disruption process in the following areas:

- Lethal firepower effects.
- Range of direct-fire weapons.
- Protection.
- Battlefield mobility.
- Information management.

Fix Enemy

2-157. A primary purpose in fixing the enemy is to isolate the objective to prevent the enemy from maneuvering to reinforce the unit targeted for destruction. The commander does everything in his power to limit the options available to his opponent. Fixing an enemy into a given position or COA and controlling their movements limit his options and reduces uncertainty on the battlefield. One method for isolating the objective is to conduct a shaping operation using lethal and nonlethal effects. Lethal fires may range from sniper fire to an indirect fire plan designed to totally destroy a selected portion of the enemy force. Another method of fixing the enemy is to tie obstacles into the existing terrain to canalize and slow the movement of enemy reserves. At lower tactical echelons, scatterable minefields (employed according to the ROE) can seal the objectives from possible enemy reinforcement or counterattacks and block or disrupt enemy actions to the flanks.

Maneuver

2-158. The commander maneuvers his forces to gain positional advantage so he can seize, retain, and exploit the initiative. He avoids the enemy's defensive strength. He employs tactics that defeats the enemy by attacking through a point of relative weakness, such as a flank or the rear. The commander exploits maneuver by—

- Taking maximum advantage of dead space and covered and concealed routes to close with the enemy.
- Using advantages in the effective ranges of weapon systems.
- Repositioning friendly forces rapidly.
- Navigating accurately cross-country.
- Obtaining situational understanding (SU) of friendly and enemy locations.
- Taking effective security measures.
- Synchronizing the application of all elements of combat power at a time and place on the battlefield to maximize their effects.

2-159. The key to success is to strike hard and fast, overwhelm a portion of the enemy force, and quickly transition to the next objective or phase, thus maintaining the momentum of the attack without reducing the pressure.

Movement Techniques

2-160. The company team commander selects from the three movement techniques (traveling, traveling overwatch, and bounding overwatch) based on several factors:

- The likelihood of enemy contact.
- The type of contact expected.
- Availability of an overwatch element.
- The terrain over which the moving element will pass.
- The level of security required during movement.
- Timeline of higher headquarters.

Traveling

2-161. Traveling is characterized by continuous movement by all company team elements. It is best suited to situations in which enemy contact is unlikely and speed is important.

Note. Organization of the company team in both traveling overwatch and bounding overwatch consists of a lead element (also called the bounding element in bounding overwatch) and a trail (or overwatch) element. The commander constitutes these elements using varying combinations of company team elements; his decision must be based on the results of his METT-TC analysis. As an example, the lead element might be one platoon and the XO's vehicle, overwatched by the remaining two platoons, the commander, and the FSO.

Traveling Overwatch

2-162. This is an extended form of traveling that provides additional security when speed is desirable but contact is possible. The lead element moves continuously. The trail element moves at various speeds and may halt periodically to overwatch movement of the lead element and scans possible enemy locations.

2-163. Dispersion between the two elements must be based on the trail element's ability both to see the lead element and to provide immediate suppressive fires in case the lead element is engaged. The intent is to maintain depth, provide flexibility, and maintain the ability to maneuver if any form of contact occurs, although a unit ideally should make contact while moving in bounding overwatch rather than traveling overwatch.

Bounding Overwatch

2-164. Bounding overwatch is used when physical or visual contact is expected. It is the most secure, but slowest, movement technique. The purpose of bounding overwatch is to deploy before contact, giving the unit the ability to protect a bounding element by immediately suppressing an enemy force.

2-165. In all types of bounding, the overwatch element is assigned sectors to scan while the bounding element uses terrain to achieve cover and concealment. The commander may designate that the overwatch element conduct reconnaissance by fire to provide the bounding element increased security. The bounding element should avoid masking the fires of the overwatch element; it must never move beyond the range at which the overwatch element can effectively suppress likely or suspected enemy positions. The company team can employ either of two bounding methods, alternate bounds and successive bounds; these are discussed in the following paragraphs.

Alternate Bounds

2-166. Covered by the rear element, the lead element moves forward, halts, and assumes overwatch positions. The rear element advances past the lead element and takes up overwatch positions. This sequence continues as necessary, with only one element moving at a time. This method is usually more rapid than successive bounds.

Successive Bounds

2-167. In the successive bounding method, the lead element, covered by the rear element, advances and takes up overwatch positions. The rear element then advances to an overwatch position roughly abreast of the lead element and halts. The lead element then moves to the next position, and so on. Only one element moves at a time, and the rear element avoids advancing beyond the lead element. This method is easier to control and more secure than the alternate bounding method, but is slower.

MOVEMENT FROM LINE OF DEPARTURE TO PROBABLE LINE OF DEPLOYMENT

2-168. The company team transitions from troop movement to maneuver once it crosses the LD. It moves as aggressively and quickly as terrain and enemy situation allow. It uses appropriate movement techniques assisted by the fires of supporting units. Fire and movement are closely integrated and coordinated. Effective suppressive fires facilitate friendly movement, which facilitates more effective fires. Whenever possible, the attacking unit uses avenues of approach that avoid strong enemy defensive positions, takes advantage of available cover and concealment, and places the unit on the flanks and rear of the defending enemy. Where cover and concealment are not available, the unit uses obscurants to conceal its movement.

Actions at PLD, Assault Position, or Final Coordination Line

2-169. The attacking unit maintains the pace of its advance as it approaches its PLD. The attacking unit splits into one or more assault and support forces once it reaches the PLD if not previously completed. At the PLD, Soldiers dismount from their combat vehicles if required. All forces supporting the assault force should be set in their support-by-fire positions before the assault force crosses the PLD. The commander synchronizes the occupation of these support-by-fire positions with the maneuver of the supported attacking unit to limit the vulnerability of the forces occupying these positions. The commander uses unit tactical SOPs, battle drills, prearranged signals, EAs, and TRPs to control direct fires from these supporting positions. A commander normally employs restricted fire lines between converging forces.

2-170. The PLD can be collocated with the assault position. The commander ensures that the final preparations of his breach force in an assault position do not delay its maneuver to the point of breach as soon as the conditions are set. The final coordination line is a phase line close to the enemy position used to coordinate the lifting or shifting of supporting fires with the final deployment of maneuver elements. Final adjustments to supporting fires necessary to reflect the actual versus the planned tactical situation take place before crossing this line. It should be easily recognizable on the ground.

2-171. Whenever possible, the assault force rapidly passes through the assault position. It may have to halt in the assault position while fires are lifted and shifted. In this case, if the enemy anticipates the assault, the assault force deploys into covered positions, screens its positions with smoke, and waits for the order to assault. As long as the assault force remains in the assault position, support forces continue their suppressive fires on the objective.

2-172. The support force employs direct and indirect fires against the selected enemy positions to destroy, suppress, obscure, or neutralize enemy weapons and cover the assault force's movement. The assault force

must closely follow these supporting fires to gain ground that offers positional advantage. This COA normally results in the fewest casualties.

BREACHING OPERATIONS

2-173. If a breach is needed, once the support force sets the conditions, the breach force reduces, proofs, and marks the required number of lanes through the enemy's tactical obstacles to support the maneuver of the assault force. The commander must clearly identify the conditions that allow the breach force to proceed to avoid confusion. From the PLD, the assault force maneuvers against or around the enemy to take advantage of the support force's efforts to suppress the targeted enemy positions. (See chapter 5, section VIII for a more detailed explanation on breaching operations.)

ACTIONS ON OBJECTIVE

2-174. The effects of the overwhelming and simultaneous application of fire, movement, and shock action characterize the final assault. This violent assault destroys or defeats and drives the enemy from the objective area.

2-175. The commander employs all fire support means to destroy and suppress the enemy and sustain the momentum of the attack. By carefully synchronizing the effects of indirect fire systems and available CAS or CCA, the commander improves the likelihood of success. Fires are planned in series or groups to support maneuver against enemy forces on or near the geographical objective. As the commander shifts artillery fires and obscurants from the objective to other targets, the assault element moves rapidly across the objective. The support element must not allow its suppressive fires to lapse. These fires isolate the objective and prevent the enemy from reinforcing or counterattacking. They destroy escaping enemy forces and systems.

Follow Through

2-176. After seizing the objective, the commander has two alternatives: exploit success and continue the attack or terminate the offensive tasks. After seizing an objective, the most likely on-order mission is to continue the attack. During consolidation, the commander continues TLP in preparation for any on-order missions assigned by a higher headquarters.

SPECIAL PURPOSE ATTACKS

2-177. The commander can launch an attack to achieve various results or for special purposes These subordinate attack tasks include—

- Ambush.
- Counterattack.
- Demonstration.
- Feint.
- Raid.
- Spoiling attack.

2-178. The commander's intent and mission variables determine the specific attack form. As subordinate attack tasks, they share many of the planning, preparation, and execution considerations of the attack. Demonstrations and feints, while forms of attack, are associated with military deception operations.

Ambush

2-179. An ambush is an attack by fire or other destructive means from concealed positions on a moving or temporarily halted enemy. An ambush stops, denies, or destroys enemy forces by maximizing the element of surprise. Ambushes can employ direct fire systems as well as other destructive means (such as command-detonated mines, indirect fires, and supporting nonlethal action). They may include an assault to close with and destroy enemy forces. In an ambush, ground objectives do not have to be seized and held.

2-180. The three types of ambush are point, area, and antiarmor. In a point ambush, a unit deploys to attack a single kill zone. In an area ambush, a unit deploys into two or more related point ambushes. Units smaller than a platoon do not normally conduct an area ambush. Antiarmor ambushes focus on moving or temporarily halted enemy armored vehicles.

2-181. A typical ambush is organized into three elements: assault, support, and security. They are defined as follows:

- **Assault.** This element fires into the kill zone. Its goal is to destroy the enemy force. When used, the assault force attacks into and clears the kill zone and may be assigned additional tasks. These include searching for items of intelligence value, capturing prisoners, and completing the destruction of enemy equipment to preclude its immediate reuse.
- **Support.** This element supports the assault element by firing into and around the kill zone, and it provides the ambush's primary killing power. The support element attempts to destroy the majority of enemy combat power before the assault element moves into the objective or kill zone.
- **Security.** This element isolates the kill zone, provides early warning of the arrival of any enemy relief force, and provides security for the assault and support elements. It secures the objective rally point and blocks enemy avenues of approach into and out of the ambush site, which prevents the enemy from entering or leaving.

Counterattack

2-182. A counterattack is an attack by part or all of a defending force against an enemy attacking force, for such specific purposes as regaining ground lost or cutting off or destroying enemy advance units, and with the general objective of denying to the enemy the attainment of the enemy's purpose in attacking. In sustained defensive operations, it is undertaken to restore the battle position (BP) and is directed at limited objectives.

2-183. The commander directs a counterattack normally conducted from a defensive posture. He does this to defeat or destroy enemy forces, exploit an enemy weakness (such as an exposed flank, or to regain control of terrain and facilities after an enemy success). A unit conducts a counterattack to seize the initiative from the enemy through offensive action. A counterattacking force maneuvers to isolate and destroy a designated enemy force. It can attack by fire into an EA to defeat or destroy an enemy force, restore the original position, or block an enemy penetration. Once launched, the counterattack normally becomes a decisive operation for the commander conducting the counterattack.

2-184. To be decisive, the counterattack must occur when the enemy is overextended, dispersed, and disorganized during their attack. All counterattacks should be rehearsed in the same conditions that they would be conducted. Careful consideration must be given to the event that will trigger the counterattack. Once committed, the counterattack force conducts the decisive operation.

Demonstration

2-185. In a military deception, a *demonstration* is a show of force in an area where a decision is not sought that is made to deceive an adversary. It is similar to a feint but no actual contact with the adversary. It is similar to a feint but no actual contact with the adversary is intended (JP 3-13.4).

2-186. A commander uses demonstrations in conjunction with other military deception activities. Generally, a demonstration is an attempt to deceive the enemy. It induces the enemy commander to move reserves and shift fire support assets to locations where he cannot immediately impact the friendly decisive operation or take other actions not conducive to his own best interests. Demonstrations are shaping operations. The commander must synchronize the conduct of this form of attack with higher and lower echelon plans and operations to prevent inadvertently placing another unit at risk.

Feint

2-187. A *feint* in military deception is an offensive action involving contact with the threat that is conducted to deceive the threat as to the location or time of the actual main offensive action (FM 3-90-1). Forces conducting a feint seek direct fire contact with the enemy but avoid decisive engagement.

2-188. As in demonstrations, a commander uses feints in conjunction with other military deception activities. In a feint, the commander assigns the force an objective that is limited in size, scope, or some other measure. Forces conducting a feint make direct fire contact with the enemy but avoid decisive engagement.

Raid

2-189. A *raid* is An operation to temporarily seize an area in order to secure information, confuse an adversary, capture personnel or equipment, or to destroy a capability culminating in a planned withdrawal (JP 3-0). It ends with a planned withdrawal upon completion of the assigned mission. The company team conducts raids as part of a larger force to accomplish missions, including the following:

- Capture prisoners, installations, or enemy materiel.
- Capture or destroy specific command and control locations.
- Destroy enemy materiel or installations.
- Obtain information concerning enemy locations, dispositions, strength, intentions, or methods of operation.
- Confuse the enemy or disrupt their plans.
- Liberate friendly personnel.

Spoiling Attack

2-190. A *spoiling attack* is a tactical maneuver employed to seriously impair a hostile attack while the enemy is in the process of forming or assembling for an attack (FM 3-90-1). It is usually employed by armored units in defense by an attack on enemy assembly positions in front of a main line of resistance or BP.

2-191. The objective of a spoiling attack is to disrupt the enemy's offensive capabilities and timelines while destroying targeted enemy personnel and equipment, not to secure terrain and other physical objectives. The following two conditions must be met to conduct a successful and survivable spoiling attack:

- The spoiling attack's objective must be obtained before the enemy's ability to respond to the attack in a synchronized and coordinated manner.
- The commander must prevent the force conducting the spoiling attack from becoming over extended.

2-192. A commander conducts a spoiling attack whenever possible during friendly defensive tasks. He strikes an enemy force when it is located in Aas or attack positions preparing for its own offensive operation or is temporarily stopped. A spoiling attack usually employs Armored forces, attack helicopters or fire support elements to attack enemy assembly positions in front of the friendly commander's main line of resistance or BPs.

SECTION IV – TRANSITIONS

2-193. A commander halts an offensive task only when it results in complete victory and the end of hostilities, when it reaches a culminating point, or when the commander receives a change in mission from a higher commander. This change in mission may be a result of the interrelationship of other elements of national power, such as a political decision.

CONSOLIDATION

2-194. *Consolidation* is the process of organizing and strengthening a newly captured position so that it can be used against the enemy (FM 3-90-1). Normally, the attacking unit tries to exploit its success regardless of the type of assault. In some situations, however, the unit may have to consolidate its gains. Consolidation may vary from a rapid repositioning of forces and security elements on the objective to a reorganization of the attacking force and organization and detailed improvement of the position for defense.

2-195. Consolidation comprises actions taken to secure the objective and defend against an enemy counterattack. The company commander uses TLP to plan and prepare for this phase of the operation. He ensures the team is ready to conduct the following actions that usually are part of consolidation:

- Eliminate enemy resistance on the objective.
- Establish security beyond the objective by securing areas that may be the source of enemy direct fires or enemy artillery observation.
- Establish additional security measures such as OPs and patrols.

- Prepare for and assist the passage of follow-on forces (if required).
- Continue to improve security by conducting other necessary defensive actions, including EA development, direct fire planning, and BP preparation.
- Adjust FPFs and register targets along likely mounted and dismounted avenues of approach.
- Protect the obstacle reduction effort.
- Secure detainees.
- Prepare for the enemy counterattack.

REORGANIZATION

2-196. *Reorganization* includes all measures taken by the commander to maintain unit combat effectiveness or return it to a specified level of combat capability (FM 3-90-1). As with consolidation, the company commander plans and prepares for reorganization as he conducts TLP. He ensures that the company team takes the following actions:

- Provides essential medical treatment and evacuates casualties as needed.
- Treats and evacuates wounded detainees and processes the remainder of detainees.
- Cross-levels personnel and adjusts task organization as required to support the next phase or mission.
- Conducts resupply operations, including rearming and refueling.
- Redistributes ammunition.
- Conducts required maintenance.
- Continues improvement of BPs, as needed.

CONTINUING OPERATIONS

2-197. For all attacks, the company team should plan to exploit success. However, at the conclusion of an engagement, the commander may be forced to defend. For short defensive tasks, units make use of existing terrain to enhance their survivability. If a longer defense is envisioned, engineer assets immediately should refocus their efforts on providing survivability support (BPs and similar activities). Engineer assets should do this even as they sustain mobility and integrate countermobility into the planned defense. The company commander considers the higher commander's concept of operations, friendly capabilities, and the enemy situation when making the decision to defend or continue offensive tasks.

Chapter 3
Defense

Defensive tasks defeat an enemy attack, gain time, economize forces, and develop conditions favorable for operations focused on offensive and stability tasks. Defensive tasks alone normally cannot achieve a decision. Their purpose is to create conditions for a counteroffensive that allows Army forces to regain the initiative. Defensive tasks are conducted to retain decisive terrain or deny a vital area to the enemy, attrite or fix the enemy as a prelude to offensive tasks, surprise action by the enemy, or increase the enemy's vulnerability by forcing the enemy commander to concentrate subordinate forces. While the offense is the most decisive type of combat operation, the defense is the stronger type. The company team uses the defense to occupy and prepare positions and mass the effects of direct fires on likely approaches. This chapter discusses basics of the defense, common defensive planning considerations, defensive techniques, EA development, and transitions.

SECTION I – BASICS OF THE DEFENSE

3-1. Defensive tasks are composed of the following characteristics: disruption, flexibility, maneuver, massing and concentration, operations in depth, preparation, and security.

DISRUPTION

3-2. The company team disrupts attackers' tempo and synchronization with actions designed to prevent them from massing combat power. Disruptive actions attempt to unhinge the enemy's preparations and their attacks. Methods include defeating or misdirecting enemy reconnaissance forces, breaking up their formations, isolating their units, and attacking or disrupting their systems.

FLEXIBILITY

3-3. Defensive operations require flexible plans. Planning focuses on preparation in depth, use of reserves, and the ability to shift the main effort. Commanders add flexibility by designating supplementary positions, designing counterattack plans, and preparing to counterattack.

MANEUVER

3-4. Maneuver allows the commander to take full advantage of the AO and mass and concentrate when desirable. Maneuver, through movement in combination with fire, allows the commander to achieve a position of advantage over the enemy to accomplish the mission. It encompasses defensive actions such as security and support Aos.

MASS AND CONCENTRATION

3-5. The commander seeks to mass the effects of overwhelming combat power where he chooses and shifts it to support the decisive operation. To obtain an advantage at decisive points, the commander economizes and accepts risk in some areas; retains and, when necessary, reconstitutes a reserve; and maneuvers to gain local superiority at the point of decision. He accepts risk in some areas to mass effects elsewhere. Obstacles, security forces, and fires can assist in reducing risk.

OPERATIONS IN DEPTH

3-6. Simultaneous application of combat power throughout the AO improves the chances for success while minimizing friendly casualties. Quick, violent, and simultaneous action throughout the depth of the company

team AO can hurt, confuse, and even paralyze an enemy force when they are most exposed and vulnerable. Such actions weaken the enemy's will and do not allow any early successes to build the confidence. Operations in depth prevent the enemy from gaining momentum in the attack. Synchronization of decisive, shaping, and sustaining operations facilitates mission success.

PREPARATION

3-7. The defense has inherent strengths. The defender arrives in the AO before the attacker and uses the available time to prepare. Defenders study the ground and select positions that allow massing fires on likely approaches. They combine natural and man-made obstacles to canalize attacking forces into EAs. Defending forces coordinate and rehearse actions on the ground, gaining intimate familiarity with the terrain.

3-8. These preparations multiply the effectiveness of the defense. Preparations end only when the company team retrogrades or begins to fight. Until then, company team preparations are continuous. Preparations in depth continue, even as the close fight begins.

SECURITY

3-9. Commanders secure their forces principally through protection, military deception, inform and influence activities, and cyber electromagnetic activities. Security operations prevent enemy intelligence, surveillance, and reconnaissance assets from determining friendly locations, strengths, and weaknesses. These measures also provide early warning and early and continuously disrupt enemy attacks. Protection efforts preserve combat power. These measures all contribute to the defender's security.

3-10. Security operations help deceive the enemy as to friendly locations, strengths, and weaknesses. They inhibit or defeat enemy reconnaissance operations. Security operations prevent enemy intelligence, surveillance, and reconnaissance assets from determining company team locations, strengths, and weaknesses. These measures provide early warning and disrupt enemy attacks early and continuously. Protection efforts preserve combat power.

DEFENSIVE TASKS

3-11. There are three defensive tasks—area, mobile, and retrograde. Each contains elements of the others, and usually contains both static and dynamic aspects. At the same time, each task must be dealt with differently when planning and executing the defense. Company teams serve as the primary maneuver elements, or terrain controlling units, for the CAB in all defensive operations. They can defend Aos or positions or they can serve as security forces or reserves as part of the CAB's coordinated defense.

Note. Division and smaller units generally conduct an area defense or a delay as part of the fixing force as the commander shapes the enemy's penetration. They might attack as part of the striking force. Alternatively, they can constitute a portion of the reserve.

3-12. As part of defensive operations, the company team can defend, delay, withdraw, counterattack, and perform security tasks. The company team usually defends, as part of the CAB's defense, in the main battle area (MBA). The company team conducts the defense to achieve one or more of the following:

- Gain time.
- Retain key terrain.
- Support other operations.
- Attrit or fix the enemy as a prelude to offensive actions.

AREA DEFENSE

3-13. The *area defense* is a defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADRP 3-90). The company team focus is on retaining terrain where the defending element positions itself in mutually supporting positions and controlling the terrain between positions. The commander uses his reserve force to reinforce fires, add depth, block penetrations, restore positions, or counterattack to destroy enemy forces and seize the initiative.

3-14. The company teams that support the MBA fight focus on retaining terrain, positioning platoons in mutually supporting battle positions and controlling the terrain between positions. The company teams tasked as a reserve reinforce fires, add depth, block penetrations, restore positions, or counterattack to destroy enemy forces and seize the initiative.

3-15. A company team in either the MBA fight or the reserve is always prepared to conduct local counterattacks or participate in major counterattacks either in an area to shore up the defense and prevent a penetration, or in reaction to a change in enemy situation where there is the opportunity to regain the initiative.

Forms of Defensive Maneuver for an Area Defense

3-16. The two forms of defensive maneuver in the area defense are defense in depth and forward defense. While the CAB commander usually selects the form of area defense to use, the higher commander often defines the general defensive scheme for the CAB. The company team may have specific mission requirements that impose constraints such as time, security, and retention of certain areas that are significant factors in the overall scheme of how the CAB will defend and the specific tasks assigned to the company team.

3-17. Based on the mission variables, the defense can consist of either strong points, battle positions, or a combination. Strong points that are located on, or covering decisive terrain, are extremely effective in the defense. The CAB commander assigns each company team their battle positions or Aos, and the company team commander determines where platoons may best defend. Companies might be tasked to detach a platoon to act as the CAB reserve.

Defense in Depth

3-18. A defense in depth is normally the commander‘s preferred option. Forces defending in depth absorb the momentum of the enemy‘s attack by forcing the enemy to attack repeatedly through mutually supporting positions in depth. Depth gives the commander’s fire support assets time to generate devastating effects and affords the defending commander multiple opportunities to concentrate the effects of overwhelming combat power against the attacking enemy. This provides more reaction time for the defending force to appropriately respond to the attack. The commander continues to gather additional information about the attacking enemy‘s intentions and capabilities between the time combat starts and the time the enemy commits to a COA. This reduces the risk of the enemy force quickly penetrating the main line of defense along an unexpected direction.

3-19. While defending in depth, company teams plan and prepare primary, alternate, supplementary, and subsequent fighting positions. As the attacking enemy force attempts to create a penetration the company’s platoons hold and or shift from one position to the next coordinating the combined effects of direct and indirect fire keeping continuous pressure on the advancing enemy. The mobility, firepower, and protection of the tanks and fighting vehicles in the company teams tank and mechanized Infantry platoons enable the option of using a more dynamic rather than purely static defense. Commanders continuously look for opportunity to conduct local counterattacks to destroy an enemy and seize the initiative.

3-20. The commander usually decides to conduct a defense in depth when—

- The mission is not restrictive and allows the commander to fight throughout the depth of the battlefield.
- The terrain does not favor a defense well forward, and there is better defensible terrain deeper within the AO.
- The AO is deep compared to its width, and there is significant depth available.
- The cover and concealment on or near the forward edge of the battle area (FEBA) is limited.
- The enemy has several times the combat power of the defender.

Forward Defense

3-21. The intent of the forward defense is to prevent enemy penetration of the defense. Due to its lack of depth, a forward defense is the least preferred. The company team deploys the majority of its combat power into forward positions near the FEBA. The commander fights to retain its forward position and may conduct counterattacks against enemy penetrations or destroy enemy forces in forward EAs. Often, counterattacks are planned forward of the FEBA to defeat the enemy.

3-22. In general, the commander uses a forward defense when a higher commander directs him to retain forward terrain for political, military, economic, and other reasons. Alternatively, a commander may choose to conduct a forward defense when the terrain in that part of the AO—including natural obstacles—favors the defending force because—

- The best BPs are located along the FEBA.
- Strong natural obstacles are located near the FEBA.
- Natural EAs occur near the FEBA.
- Cover and concealment in the rear portion of the AO are limited.

MOBILE DEFENSE

3-23. *Mobile defense* is a defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADRP 3-90). Mobile defense focuses on destroying the attacking force by allowing enemy to advance into a position that exposes the enemy to counterattack and envelopment. The commander uses the fixing force to hold attacking enemy forces in position, help channel attacking enemy forces into ambush areas, and retain areas from which to launch the striking force. A mobile defense requires an AO of considerable depth. The commander must be able to shape the battlefield, causing an enemy force to overextend its lines of communication (LOCs), expose its flanks, and dissipate its combat power. Likewise, the commander must be able to move friendly forces around and behind the enemy force targeted to be cut off and destroyed. Divisions and larger formations normally execute mobile defenses. However, the company team generally conducts an area defense or a delay as part of the fixing force as the commander shapes the enemy's penetration, or they attack as part of the striking force.

Note. Units smaller than a division do not usually conduct a mobile defense because of their inability to fight multiple engagements throughout the width, depth, and height of their AO, while simultaneously resourcing the striking, fixing, and reserve forces.

3-24. The company team, as part of a larger organization, participates in a mobile defense as either part of the fixing force or part of the striking force, but not both. As part of the fixing force, the company team defends within its assigned AO, although the AO might be larger than usual. As part of the striking force, the company team plans, rehearses, and executes offensive operations.

3-25. The term "striking force" is used rather than the term "reserve" because reserve indicates an uncommitted force. The striking force is a committed force and has the resources to conduct a counterattack as part of the mobile defense. The striking force engages the enemy as they become exposed in their attempts to overcome the fixing force. Because the striking force normally attacks a moving enemy force, it is usually Armor heavy.

RETROGRADE TASKS

3-26. Company teams most often conduct retrogrades as part of a larger force but may conduct independent retrogrades as required. The CAB commander must approve the operation.

3-27. The *retrograde* is a defensive task that involves organized movement away from the enemy (ADRP 3-90). It may be forced by the enemy or may be made voluntarily. Such movements may be classified as withdrawal, retirement, or delaying action. The enemy may force these operations or a commander may execute them voluntarily. In either case, the higher commander of the force executing the operation must approve the retrograde. Retrograde tasks are conducted to improve a tactical situation or to prevent a worse situation from developing. Retrograde tasks are transitional operations; they are not considered in isolation.

3-28. The commander executes retrogrades to—

- Disengage from operations.
- Gain time without fighting a decisive engagement.
- Draw the enemy into an unfavorable situation or extend the enemy's LOCs.
- Preserve the force or avoid combat under undesirable conditions, such as continuing an operation that no longer promises success.
- Reposition forces to more favorable locations or conform to movements of other friendly troops.

- Position the force for use elsewhere in other missions.
- Simplify sustainment support of the force by shortening LOCs.
- Position the force where it can safely conduct reconstitution.
- Adjust the defensive scheme, such as secure more favorable terrain.
- Deceive the enemy.

3-29. The three retrograde tasks are delay, withdrawal, and retirement. In each task, a force moves to the rear, using combinations of combat formations and marches. (See chapter 2, which discusses combat formations.) The commander may use all three tasks singularly or in combination with other offensive or defensive tasks.

Delay

3-30. A *delaying operation* is an operation in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged (JP 3-04). Delays gain time to—

- Allow other friendly forces to establish a defense.
- Cover a withdrawing force.
- Protect a friendly force's flank.
- Allow other forces to counterattack.

Withdrawal

3-31. A *withdrawal operation* is a planned retrograde operation in which a force in contact disengages from an enemy force and moves in a direction away from the enemy (JP 3-17). The commander's intent and mission variables determine which type of withdrawal the units use. Withdrawals may be assisted or unassisted and they may or may not take place under enemy pressure.

Retirement

3-32. *Retirement* is a form of retrograde in which a force out of contact moves away from the enemy (ADRP 3-90). A retiring unit organizes for combat but does not anticipate interference by enemy ground forces. Typically, another unit's security force covers the movement of one formation as the unit conducts a retirement. However, mobile enemy forces, unconventional forces, air strikes, air assaults, or long-range fires may attempt to interdict the retiring unit. The commander must plan for enemy actions and organize the unit to fight in self-defense. The commander usually conducts retirement operations to reposition his forces for future operations or to accommodate the current concept of the operation. Units conduct retirements as tactical road marches where security and speed are the most important considerations warfighting functions.

FORMS OF THE DEFENSE

3-33. There are three forms of the defense, defense of a linear obstacle, perimeter defense, and reverse slope defense. Each of the forms of defense have special purposes and have their own unique planning considerations.

DEFENSE OF A LINEAR OBSTACLE

3-34. The commander normally prefers to conduct an area defense because it accepts less risk by not allowing the enemy to cross the obstacle. Linear obstacles such as mountain ranges or river lines generally favor a forward defense. It is extremely difficult to deploy in strength along the entire length of a linear obstacle. The defending commander must conduct economy of force measures in some areas.

3-35. Within an area defense, the commander's use of a defense in depth accepts the possibility that the enemy may force a crossing at a given point. The depth of the defense should prevent the enemy from rapidly exploiting its success. It defuses the enemy's combat power by forcing the enemy to contain bypassed friendly BPs to attack positions in greater depth. (Refer to FM 3-90-1 for more information.)

3-36. When planning the defense of a linear obstacle, the commander applies the same considerations he would apply to an area and mobile defense when planning to defend a linear obstacle. While the linear

obstacle may provide increased natural protection, it may offer the enemy the ability to exploit a penetration. The commander should consider how to best institute economy of force to concentrate effects if any successful penetration along the breadth of the defense.

PERIMETER DEFENSE

3-37. A perimeter defense is a defense oriented in all directions. The company uses it for self-protection, and to protect other units located within the perimeter. The company can employ a perimeter defense in urban or woodland terrain. In terms of weapons emplacement, direct and indirect fire integration, and reserve employment, a commander conducting a perimeter defense considers the same factors he considers for a strong-point operation. (Refer to FM 3-90-1 for more information.)

3-38. The company might be called upon to execute the perimeter defense under a variety of conditions, including when it—

- Must secure itself against terrorist or guerilla attacks in an urban area.
- Must conserve or build combat power to execute offensive or patrolling operations.
- Must hold critical terrain in areas where the defense is not tied in with adjacent units.
- Has been bypassed and isolated by the enemy and must defend in place.
- Conducts occupation of an independent AA or reserve position.
- Begins preparation of a strong point.
- Is directed to concentrate fires into two or more adjacent avenues of approach.

3-39. While in a perimeter defense, the commander should consider the following:

- Placing security as far out as possible.
- Positioning Armor and antiarmor weapons in protected positions and concentrating their fires on armor avenues of approach and related EAs.
- Maintaining a reserve.
- Retention of key terrain.
- Location of the reserve.
- Mission command.
- Sustainment operations and sustainment security.

REVERSE-SLOPE DEFENSE

3-40. An alternative to defending on the forward slope of a hill or a ridge is to defend on a reverse slope. In such a defense, the company team is deployed on terrain that is masked from enemy direct fire and ground observation by the crest of a hill. Although some units and weapons might be positioned on the forward slope, the crest, or the counter-slope (a forward slope of a hill to the rear of a reverse slope), most forces are on the reverse slope. (Refer to FM 3-90-1 for more information.) The key to this defense is control of the crest by direct fire.

3-41. The commander can adopt a reverse-slope position when—

- Enemy fire makes the forward slope untenable.
- Lack of cover and concealment on the forward slope makes it untenable.
- The forward slope has been lost or has not yet been gained.
- The forward slope is exposed to enemy direct fire weapons fired from beyond the effective range of the defender's weapons. Moving to the reverse slope removes the attacker's standoff advantage.
- The terrain on the reverse slope provides better fields of fire than the forward slope.
- The defender must avoid creating a dangerous salient or reentrant in friendly lines.
- Surprising and deceiving the enemy as to the true location of the CAB BPs is essential.

3-42. When executing a reverse-slope defense, the company commander places special emphasis on the following:

- A fire support plan to prevent the enemy's occupation and use of the crest of the hill.

- The use of OPs or reconnaissance elements on the forward slope to provide observation across the entire front and security to the main BPs.
- A counterattack plan that specifies measures necessary to clear the crest or regain it from the enemy.
- Fire support to destroy, disrupt, and attrite enemy forces on the forward slope.

3-43. The forward edge of the position should be within small-arms range of the crest. It should be far enough from the crest that fields of fire allow the defender time to place well-aimed fire on the enemy before they reach friendly positions. The company establishes OPs on or forward of the topographical crest. This allows long-range observation over the entire front and indirect fire coverage of forward obstacles. Observation posts are usually provided by the unit that owns the terrain being observed, and may vary in size from a few Soldiers to a reinforced squad. They should include Fos. At night, their number should be increased to improve security. Considerations that commanders may apply when defending on a reverse slope are the following:

- Observation of the enemy is more difficult. Soldiers in this position see forward no farther than the crest. This makes it hard to determine exactly where the enemy is as he advances, especially when visibility is poor. OPs must be placed forward of the topographic crest for early warning and long-range observation.
- Egress from the position might be more difficult.
- Fields of fire are usually short.
- Obstacles on the forward slope can be covered only with indirect fire or by units on the flanks of the company unless some weapons systems are initially placed forward.
- If the enemy gains the crest, he can assault downhill, which may give him a psychological advantage.

3-44. If OPs are insufficient or improperly placed, defenders might have to fight an enemy who suddenly appears in strength at close range.

SECTION II – PLANNING CONSIDERATIONS

COMMON PLANNING CONSIDERATIONS

3-45. Planning a defensive operation is a complex effort requiring detailed planning and extensive coordination. In the defense, synchronizing the effects of the company team's combat and supporting systems enables a commander to apply overwhelming combat power against selected advancing enemy forces to unhinge the enemy commander's plan and destroy his combined arms team. As an operation evolves, the commander knows he probably will need to shift his decisive and shaping operations to press the fight and keep the enemy off balance.

3-46. The warfighting functions provide the company commander a means to plan, prepare, and execute a tactical operation. The synchronization and coordination of activities within each warfighting function and among the various warfighting functions are critical to the success of the company team.

MISSION COMMAND

3-47. A defensive mission generally imposes few restrictions on the commander. It allows freedom of maneuver within assigned boundaries, but requires the commander to prevent enemy penetration of the rear boundary. The commander must ensure that subordinate unit defensive plans are compatible and that control measures, such as contact points and phase lines, are sufficient for flank coordination when assigning areas of operations.

3-48. The commander's vision of anticipated enemy actions must be integrated with the CAB's IPB. From that, the company commander and COIST refine the IPB to focus on the details of the operation in the company team's AO. The CAB commander usually defines where and how the CAB will defeat or destroy the enemy. The company commander defines how he envisions the company team will execute its portion of the battalion fight.

MOVEMENT AND MANEUVER

3-49. Maneuver considerations employ direct fire weapons on the battlefield. In the defense, effective weapons positioning is critical to the company success. Effective weapons positioning enables the company team to mass fires at critical points on the battlefield and shift fires as necessary. The company commander must exploit the strengths of his weapons systems while minimizing the company exposure to enemy observation and fires.

3-50. The commander must designate and position the reserve in a location where it can effectively react to several contingency plans. He must consider terrain, trafficability of roads, potential EAs, probable points of enemy penetrations, and commitment time. The CAB commander can have a single reserve under his control, or, if the terrain dictates, company teams can designate their own reserves. The reserve should be positioned in a covered and concealed position. Information concerning the reserve may be considered essential elements of friendly information and protected from enemy reconnaissance. The commander might choose to position his reserve forward initially to deceive the enemy or to move the reserve occasionally to prevent it from being targeted by enemy indirect fires.

INTELLIGENCE

3-51. The company commander never has all the information he needs about the enemy. Therefore, he must obtain or develop the best possible IPB products, conduct continuous reconnaissance, and integrate new and updated intelligence throughout the operation. He may need to request information from the battalion staff to answer company intelligence requirements.

3-52. As with all tactical planning, IPB is a critical part of defensive planning. It helps the commander define where to concentrate combat power, accept risk, and plan potential decisive actions. To aid in the development of a flexible defensive plan, the IPB must present as many feasible enemy COAs as time permits. The essential areas of focus are—

- Analyze terrain and weather.
- Determine enemy force size and likely COAs with associated decision points.
- Determine enemy vulnerabilities and high-value targets.
- Impact of civilian population on the defensive operations.

3-53. The commander bases his determination of how and where to defeat the enemy on where he believes the enemy will go, the terrain, and the forces available. The CAB may define a defeat mechanism that includes single or multiple counterattacks to achieve success. The company commander and his COIST analyze their unit's role in the CAB fight and determine how to achieve success.

FIRES

3-54. For the indirect fire plan to be effective in the defense, the company team plans and executes fires in a manner that achieves the intended task and purpose for each target. (See chapter 7 in this manual for more information on Fires and Indirect Fire Planning.) Indirect fires serve a variety of purposes in the defense, including the following:

- Slow and disrupt enemy movement.
- Prevent the enemy from executing breaching operations.
- Destroy or delay enemy forces at obstacles using massed fires or pinpoint munitions.
- Disrupt enemy support-by-fire elements.
- Defeat attacks along dismounted avenues of approach with FPFs.
- Disrupt the enemy to enable friendly elements to disengage or conduct counterattacks.
- Obscure enemy observation or screen friendly movement during disengagement and counterattacks.
- Provide smoke screens to separate enemy echelons or to silhouette enemy formations to facilitate direct fire engagement.
- Provide illumination as needed.

- Execute suppression of enemy air defense missions to support aviation operations.
- Provide final protective fires.

3-55. In developing the fire plan, the company commander, along with FSO, evaluates indirect fire systems available to provide support. Considerations when developing the plan include tactical capabilities, weapons ranges, and available munitions. These factors help the company commander and FSO determine the best method for achieving the task and purpose of each target in the fire plan. The company fire support personnel contribute significantly to the fight. Effective positioning is critical. The company commander and FSO must select positions that provide fire support personnel with unobstructed observation of the AO and ensure survivability.

3-56. Air and missile defense support to the company team may be limited. Units should expect to use their organic weapons systems for self-defense against enemy air threats. They should include the following:

- Plan for CBRN reconnaissance at likely locations for enemy employment of CBRN agents and hazards.
- Use obscurants to support disengagement or movement of forces.
- Assign sectors of fire to prevent fratricide.

SUSTAINMENT

3-57. In addition to sustainment functions required for all operations, the company commander's planning process includes pre-positioning of ammunition caches, positioning of company trains, and providing Class IV/V supply points and mine dumps.

3-58. The commander's mission analysis may reveal that the company's ammunition requirements during an upcoming operation exceed its basic load. This requires the company to pre-position ammunition caches. The company usually positions ammunition caches at alternate or subsequent positions. The company may dig in and guard these caches to prevent their capture or destruction by the enemy.

3-59. The company train usually operates 500 to 1000 meters or one terrain feature to the rear of the company to provide immediate recovery and medical support. The company trains conduct evacuation (of those wounded in action, weapons, and equipment) and resupply as required. The company trains are located in covered and concealed positions close enough to the company to provide responsive support, but out of enemy direct fire. The 1SG or XO positions the trains and supervises sustainment operations. The company commander ensures all elements know the locations of the battalion combat and field trains as well as the company casualty collection point, BAS, and casualty evacuation procedure. The company commander's analysis determines the most effective measures for every mission.

PROTECTION

3-60. Survivability construction includes BPs, protective positions, and hardening. These are prepared to protect vehicles, personnel, and weapons systems. Positions can be constructed and reinforced with overhead cover to increase the survivability of dismounts and crew-served weapons against shrapnel from airbursts. Vehicle positions can be constructed with both hull and turret-defilade observation positions. The company team may use digging assets for ammunition caches at alternate, supplementary, or subsequent positions.

3-61. All leaders must understand the survivability plan and priorities. Typically, the engineer PL creates an information card, which enables the commander to track the survivability effort. One person in the company, usually the company executive officer or 1SG, is designated to enforce the plan and priorities and ensure that the completion status is accurately reported and tracked.

ORGANIZATION OF FORCES

3-62. The defending force can be organized to accomplish reconnaissance, security, MBA, reserve, and sustainment missions. The commander must have a clear understanding of what his task and purpose is. This understanding will assist in the organization of his units. The commander has the option of defending forward or defending in depth. When the commander defends forward within an AO, the force is organized so that most of the available combat power is committed early in the defensive effort. To accomplish this, the commander may deploy forces forward or plan counterattacks well forward in the MBA or even beyond the MBA. If the commander has the option of conducting a defense in depth, security forces and forward MBA

elements are used to identify, define, and control the depth of the enemy's main effort while holding off secondary thrusts. This allows the commander to conserve combat power, strengthen the reserve, and better resource the counterattack.

SECURITY

3-63. The commander balances the need to create a strong security force to shape the battle with the resulting diversion of combat power from the main body's decisive operation. The commander can allocate security forces to provide early warning and protect those forces, systems, and locations necessary to conduct the decisive operation from unexpected enemy contact.

3-64. A company team assigned a security mission within the CAB's security area is primarily tasked with the following:

- Deceive the enemy as to friendly locations, strengths and weaknesses.
- Inhibit or destroy enemy reconnaissance forces.
- Provide early warning and disrupt enemy attacks early and continuously.
- Protect the main body of the CAB to preserve combat power for the main defense.

MAIN BATTLE AREA

3-65. The company team commanders position their subordinate forces in mutually supporting positions in depth to absorb enemy penetrations or canalize them into prepared engagement areas as directed by the CAB's defensive plan to defeat the enemy's attack by concentrating the effects of overwhelming combat power. The MBA includes the area where the defending force creates an opportunity to deliver a decisive counterattack to defeat or destroy the enemy.

3-66. The commander builds the decisive operation around identified decisive points, such as key terrain or high-payoff targets. The commander normally positions the main body within the MBA where the commander wants to conduct the decisive operation. The majority of the main body deploys into prepared positions within the MBA.

RESERVE

3-67. A company team task-organized as the reserve typically locates in an assembly area or a concealed location until committed to the fight. The CAB commander determines the size and task organization of the reserve based on his METT-TC analysis. Typically the reserve will have few if any other mission tasks during preparation and execution of the defense other than rehearsing to respond to possible contingencies and the movement routes and techniques to move anywhere in the units AO once committed.

3-68. The reserve is not a committed force. In certain situations, it may become necessary to commit the reserve to restore the integrity of the defense by blocking an enemy penetration or reinforcing fires into an EA.

SUSTAINMENT

3-69. The sustainment mission in an area defense requires a careful balance between establishing forward supply stocks of petroleum, oils, and lubricants; barrier material; and ammunition in adequate amounts to support defending units and having so many supplies located in forward locations that they cannot be rapidly moved in conformance with enemy advances. Any suitable petroleum, oils, and lubricants, barrier material, construction equipment, and laborers that can be lawfully obtained from the civil infrastructure reduce the defending unit's transportation requirements. Likewise, maintenance and Class VIII with their associated repair parts and medical supplies must be forward deployed.

SEQUENCE OF DEFENSE

3-70. Usually, as part of a larger element, the company team conducts defensive operations performing several integrated and overlapping activities. Sometimes a company team must defend against an enemy that does not have a conventional doctrine-based operational foundation. This enemy situation requires a more flexible plan that allows for more responsive and decentralized control of combat power rather than spreading

it evenly throughout the company's AO. The company team may conduct "base-camp" or perimeter defense operations along with offensive and patrolling operations against terrorist, insurgent, or guerilla forces.

GAIN AND MAINTAIN ENEMY CONTACT

3-71. Gaining and maintaining enemy contact in the face of the enemy's determined efforts to destroy friendly reconnaissance assets is vital to the success of defensive operations. As the enemy's attack begins, the defending unit's first concerns are to identify committed enemy units' positions and capabilities, determine the enemy's intent and direction of attack, and gain time to react. The commander uses the information available to him, in conjunction with military judgment, to determine the point at which the enemy commits to a COA.

3-72. Early detection of the enemy's decisive operation provides the commander with reaction time to adjust the fixing force's positions and shape the enemy penetration, which, in turn, provides the time necessary to commit the striking force or reserve force.

DISRUPT THE ENEMY

3-73. The commander executes shaping operations to disrupt the enemy regardless of the enemy's location within the AO. After making contact with the enemy, the commander seeks to disrupt the enemy's plan, ability to control forces, and combined arms team. Ideally, the results of the commander's shaping operations should force a disorganized enemy, whose ability to synchronize its elements has been degraded, to conduct a MTC against prepared defenses. Once the process of disrupting the attacking enemy begins, it continues throughout a defensive operation.

3-74. Whenever possible the commander sequences these shaping operations, so that the impact of their effects coincides with the commitment of the striking force. To generate a tempo that temporarily paralyzes enemy command and control, the intensity of these shaping operations may increase dramatically on the commitment of the striking force. The commander continues to conduct shaping operations once the striking force commits to prevent enemy forces from outside the objective area from interfering with executing the decisive counterattack.

FIX THE ENEMY

3-75. The commander does everything possible to limit options available to the enemy when conducting an area defense. In addition to disrupting the enemy, the commander conducts shaping operations to constrain the enemy into a specific COA, control enemy movements, or fix the enemy in a given location. These actions limit the enemy's options. While executing these operations, the commander continues to find and delay or attrit enemy follow-on and reserve forces to keep them from entering the MBA.

3-76. The commander has several options to help fix an attacking enemy force. The commander can design shaping operations—such as securing the flanks and point of a penetration—to fix the enemy and allow friendly forces to execute decisive maneuver elsewhere.

3-77. The commander uses obstacles covered by fire to fix, turn, block, or disrupt to limit the enemy's available options. Properly executed obstacles are a result of the synthesis of top-down and bottom-up obstacle planning and emplacement. Blocking forces can affect enemy movement. A blocking force may achieve its mission from a variety of positions depending on the mission variables.

Tactical Obstacles

3-78. Tactical obstacles and fires manipulate the enemy in a way that supports the commander's intent and scheme of maneuver. The intended effect that the commander wants the obstacles and fires to have on the enemy is called the obstacle effect. The obstacle effect drives integration, focuses subordinates' fires, focuses obstacle effort, and multiplies the effect of firepower. See figure 3-1 for graphics and effects.

OBSTACLE EFFECT	PURPOSE	FIRES AND OBSTACLES MUST:	OBSTACLE CHARACTERISTICS
DISRUPT 	• Break up enemy formations. • Interrupt enemy's timetable and C2. • Cause premature commitment of breach assets. • Cause the enemy to piecemeal his attack.	• Cause the enemy to deploy early. • Slow part of his formation while allowing part to advance unimpeded.	• Do not require extensive resources. • Ensure obstacles are difficult to detect at long range.
FIX 	• Slow an attacker within an area so he can be destroyed. • Generate the time necessary for the friendly force to disengage.	• Cause the enemy to deploy into attack formation before encountering the obstacles. • Allow the enemy to advance slowly in an EA or AO. • Make the enemy fight in multiple directions once he is in the EA or AO.	• Array obstacles in depth. • Span the entire width of the avenues of approach. • Avoid making the terrain appear impenetrable.
TURN 	• Force the enemy to move in the direction desired by the friendly commander.	• Prevent the enemy from bypassing or breaching the obstacle belt. • Maintain pressure on the enemy force throughout the turn. • Mass direct and indirect fires at the anchor point of the turn.	• Tie into impassable terrain at the anchor point. • Use obstacles in depth. • Provide a subtle orientation relative to the enemy's approach.
BLOCK 	• Stop an attacker along a specific avenue of approach. • Prevent an attacker from passing through an AO or EA. • Stop the enemy from using an avenue of approach and force him to use another avenue of approach.	• Prevent the enemy from bypassing or penetrating through the belt. • Stop the enemy's advance. • Destroy all enemy breach efforts.	• Tie into impassable terrain. • Use complex obstacles. • Defeat the enemy's mounted and dismounted breaching effort.

LEGEND

AO	AREA OF OPERATIONS	EA	ENGAGEMENT AREA
C2	COMMAND & CONTROL		

Figure 3-1. Obstacle effects

MANEUVER

3-79. In an area defense, the decisive operation occurs in the MBA. This is where the effects of shaping operations, coupled with sustaining operations, combine with the decisive operations of the MBA force to defeat the enemy. The commander's goal is to prevent the enemy's further advance through a combination of fires from prepared positions, obstacles, and mobile reserves.

3-80. The commander's SU is critical in establishing the conditions that initiate the striking force's movement and in determining the general area that serves as a focus for the counterattack. SU includes identifying those points in time and space where the counterattack proves decisive. A force-oriented objective or an EA usually indicates the decisive point.

FOLLOW THROUGH

3-81. Defensive operations retain terrain and create conditions for a counteroffensive that regains the initiative. All defensive operations create the opportunity to transition to the offense. The area defense does this by causing the enemy to sustain unacceptable losses short of any decisive objectives. A successful area defense allows the commander to transition to an attack. An area defense could result in a stalemate with both forces left in contact with each other. Finally, it could result in the defender being overcome by the enemy attack and needing to transition to a retrograde operation. Any decision to withdraw must take into account the current situation in adjacent defensive areas. Only the commander who ordered the defense can designate a new FEBA or authorize a retrograde operation.

3-82. In a mobile defense, that transitional opportunity generally results from the success of the striking force's attack. The commander exploits success and attempts to establish conditions for a pursuit if the result of the commander's assessment of the striking force's attack shows that there are opportunities for future offensive operations. If the conduct of the mobile defense is unsuccessful and the enemy retains the initiative, the commander must either reestablish a viable defense or conduct retrograde operations.

COMMON DEFENSIVE CONTROL MEASURES

3-83. The commander controls the defense by using control measures to provide the flexibility needed to respond to changes in the situation and allow the defending commander to rapidly concentrate combat power at the decisive point. Defensive control measures within a commander's AO include designating the security area, the battle handover line (BHL), the MBA with its associated FEBA, and echelon support.

3-84. The commander can use BPs and additional direct fire support control measures to further synchronize the employment of combat power. The commander designates disengagement lines to trigger the displacement of subordinate forces.

BATTLE HANDOVER LINE

3-85. The *battle handover line* is a designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa (ADRP 3-90).

BATTLE POSITIONS

3-86. A *battle position* is a defensive location oriented on a likely enemy avenue of approach (ADRP 3-90). Units as large as battalion task forces and as small as squads or sections use BPs. They may occupy the topographical crest of a hill, a forward slope, a reverse slope, or a combination of these areas. The commander selects his positions based on terrain, enemy capabilities, and friendly capabilities. A commander can assign all or some subordinates BPs within the AO.

3-87. There are five types of BPs—

- **Primary.** This position covers the enemy's most likely avenue of approach into the area.
- **Alternate.** This position is assigned when the primary position becomes untenable or unsuitable for carrying out the assigned task. It allows the defender to carry out his original task. The following considerations apply for an alternate BP, which:
  - Covers the same avenue of approach or sector of fire as the primary BP.
  - Is located slightly to the front, flank, or rear of the primary BP.
  - May be positioned forward of the primary BP during limited visibility operations.
  - Is employed to supplement or support positions with weapons of limited range, such as dismounted positions
- **Supplementary.** This position is located within a unit's assigned AO that provides sectors of fire and defensible terrain along an avenue of approach that is not the enemy's expected avenue of attack. For example, an avenue of approach into a company's AO from one of its flanks could require the company to direct its platoons to establish supplementary positions to allow the platoons to engage enemy forces traveling along that avenue. The PL formally assigns supplementary positions when the platoon must cover more than one avenue of approach.
- **Subsequent.** This is a position the unit expects to move during the battle. A defending unit may have a series of subsequent positions. Subsequent positions can have associated primary, alternate, and supplementary positions.
- **Strong point.** This is a heavily fortified BP tied to a natural or reinforcing obstacle to create an anchor for the defense or to deny the enemy decisive or key terrain. The mission to create and defend a strong point implies retention of terrain to stop or redirect enemy formations. A strong point requires extensive time, engineer support, and Class IV resources to construct. A strong point is used to—
  - **Canalize enemy forces.** Canalize is a tactical mission task in which the commander restricts enemy movement to a narrow zone by exploiting terrain coupled with obstacles, fires, or friendly maneuver.

- **Contain enemy forces.** Contain is a tactical mission task that requires the commander to stop, hold, or surround enemy forces. It can cause the enemy to center their activity on a given front and prevent them from withdrawing any part of their forces for use elsewhere.

FORWARD EDGE OF THE BATTLE AREA

3-88. The FEBA is the foremost limit in a series of areas in which ground combat units are deployed, excluding the areas in which the covering or screening forces are operating, designated to coordinate fire support, the positioning of forces, or the maneuver of units.

MAIN BATTLE AREA

3-89. The *main battle area* is the area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy (ADRP 3-90). The defending commander's major advantage is the ability to select the ground on which the battle takes place. The defender positions subordinate forces in mutually supporting positions in depth to absorb enemy penetrations or canalize them into prepared EAs, defeating the enemy's attack by concentrating the effects of overwhelming combat power. The natural defensive strength of the position determines the distribution of forces in relation to both frontage and depth. Defending units typically employ field fortifications and obstacles to improve the terrain's natural defensive strength. The MBA includes the area where the defending force creates an opportunity to deliver a decisive counterattack to defeat or destroy the enemy.

SECTION III – ENGAGEMENT AREA DEVELOPMENT

3-90. The EA is where the commander intends to trap and destroy an enemy force using the massed fires of all available weapons. The success of any engagement depends on how effectively the commander can integrate the obstacle plan, the indirect fire plan, and the direct fire plan within the EA to achieve the company team's tactical purpose. (See Chapter 6 for more information about direct fire planning.)

3-91. At the company team level, EA development is a complex function, demanding parallel planning and preparation if the team is to accomplish the myriad tasks for which it is responsible. Despite this complexity, however, EA development resembles a drill in that the commander and his subordinate leaders use an orderly, fairly standard set of procedures. The steps of EA development are not a rigid sequential process; some steps may occur simultaneously to ensure the synergy of combined arms. Beginning with evaluation of mission variables, the development process covers the following steps:

- Identify all likely enemy avenues of approach.
- Determine likely enemy schemes of maneuver.
- Determine where to kill the enemy.
- Plan and integrate obstacles.
- Emplace weapon systems.
- Plan and integrate indirect fires.
- Rehearse the execution of operations in the EA.

IDENTIFY LIKELY ENEMY AVENUES OF APPROACH

3-92. The company commander and COIST can use the following procedures and considerations when identifying the enemy's likely avenues of approach (see figure 3-2 on page 3-15):

- Conduct initial reconnaissance, doing this, if possible, from the enemy's perspective along each avenue of approach into the sector or EA.
- Identify key and decisive terrain, including locations that afford positions of advantage over the enemy, as well as natural obstacles and chokepoints that restrict forward movement.
- Determine which avenues provide cover and concealment for the enemy while allowing them to maintain their tempo.
- Determine what terrain the enemy is likely to use to support each avenue.
- Evaluate lateral routes adjoining each avenue of approach.

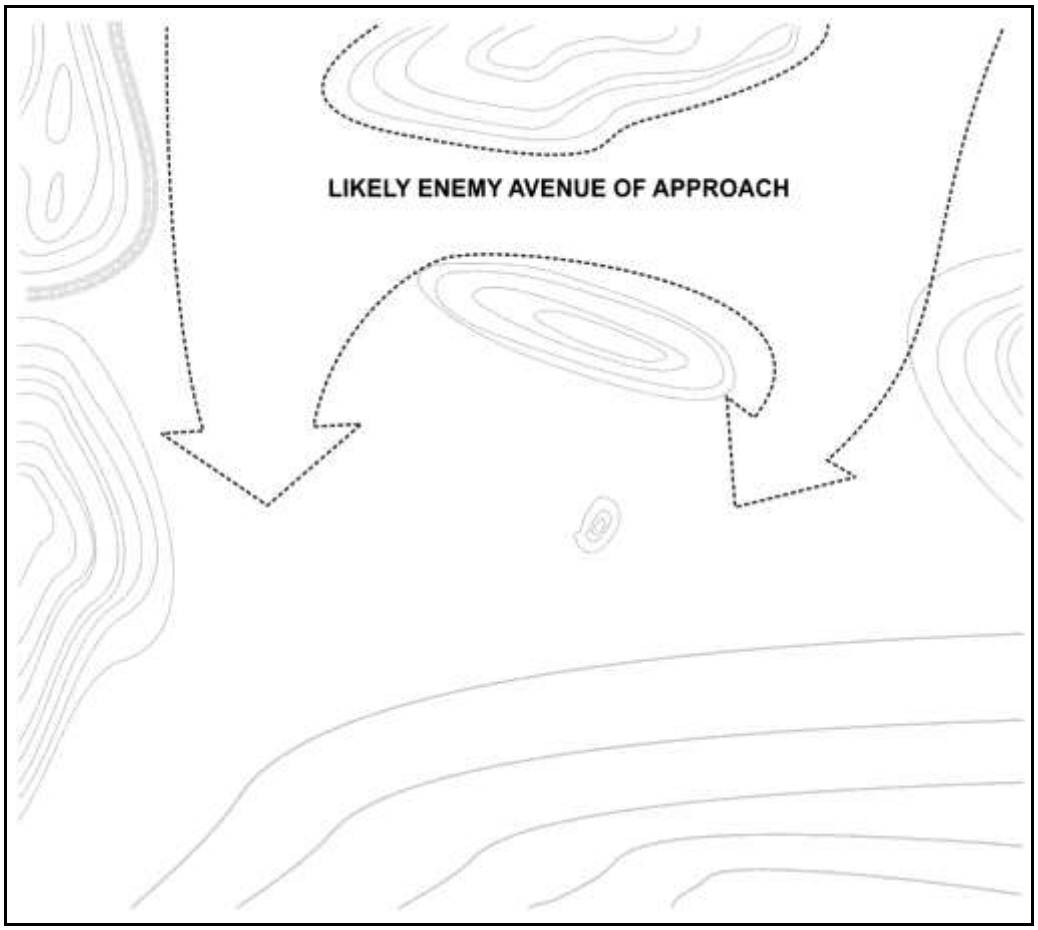

Figure 3-2. Identify likely enemy avenues of approach

DETERMINE ENEMY SCHEME OF MANEUVER

3-93. The company commander and COIST can use the following procedures and considerations to determine the enemy's scheme of maneuver (see figure 3-3):

- How the enemy will structure the attack.
- How the enemy will use his reconnaissance assets; will they attempt to infiltrate friendly positions?
- Where and when the enemy will change formations and establish support by fire positions.
- Where, when, and how the enemy will conduct their assault and breaching operations.
- Where and when they will commit follow-on forces.
- The enemy's expected rates of movement.
- The effects of their combat multipliers and the anticipated locations/areas of employment.
- What reactions the enemy is likely to have in response to projected friendly actions.

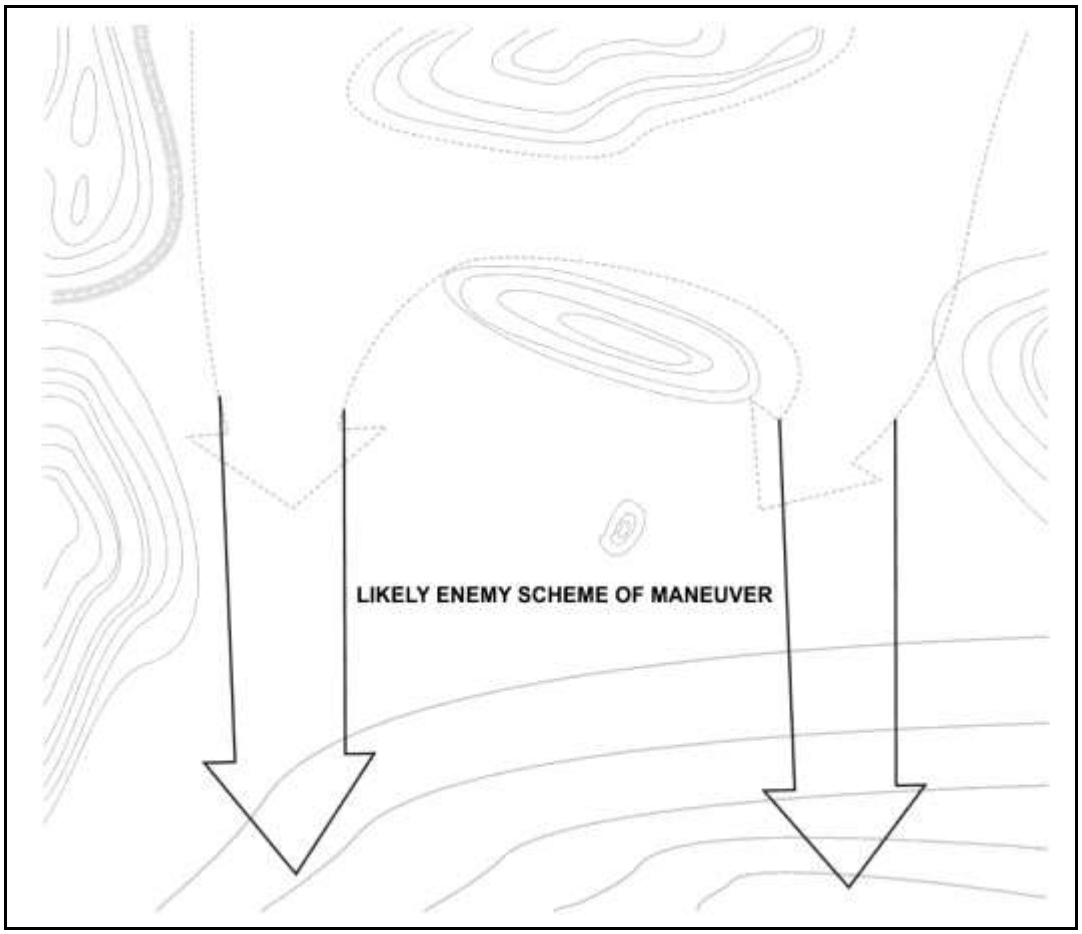

Figure 3-3. Likely enemy scheme of maneuver

DETERMINE WHERE TO KILL ENEMY

3-94. To determine where the company team will engage the enemy, the company commander (see figure 3-4 on page 3-17)—

- Identifies TRPs that match the enemy's scheme of maneuver and detects where enemy forces can be engaged through the depth of the sector.
- Identifies and records the exact location of each TRP. In marking TRPs, thermal sights are used to ensure visibility at the appropriate range under varying conditions, including daylight and limited visibility (darkness, smoke, dust, or other obscurants).
- Determines how many weapon systems will focus fires on each TRP to achieve the desired end state.
- Determines which platoons will mass fires on each TRP.
- Establishes EAs around TRPs.
- Develops direct fire planning measures necessary to focus fires at each TRP.

Figure 3-4. Identify where to kill the enemy

PLAN AND INTEGRATE OBSTACLES

3-95. The following steps apply in planning and integrating obstacles in the company team defense. The company commander (see figure 3-5)—

- Determines the obstacle group intent with the engineer PL confirming the target, relative location, and effect.
- Ensures intent supports the task force scheme of maneuver.
- Identifies, sites, and marks obstacles within the obstacle group in conjunction with the engineer PL.
- Integrates protective obstacle types and locations within company team defense.
- Ensures coverage of all obstacles with direct fires.
- Assigns responsibility for guides and lane closure as required.
- Assists engineer platoons in emplacing obstacles, according to METT-TC, securing Class IV/V point, securing mine dump, or securing obstacle works sites.
- Coordinates engineer disengagement criteria, actions on contact, and security requirements with the engineer PL at the obstacle work site.

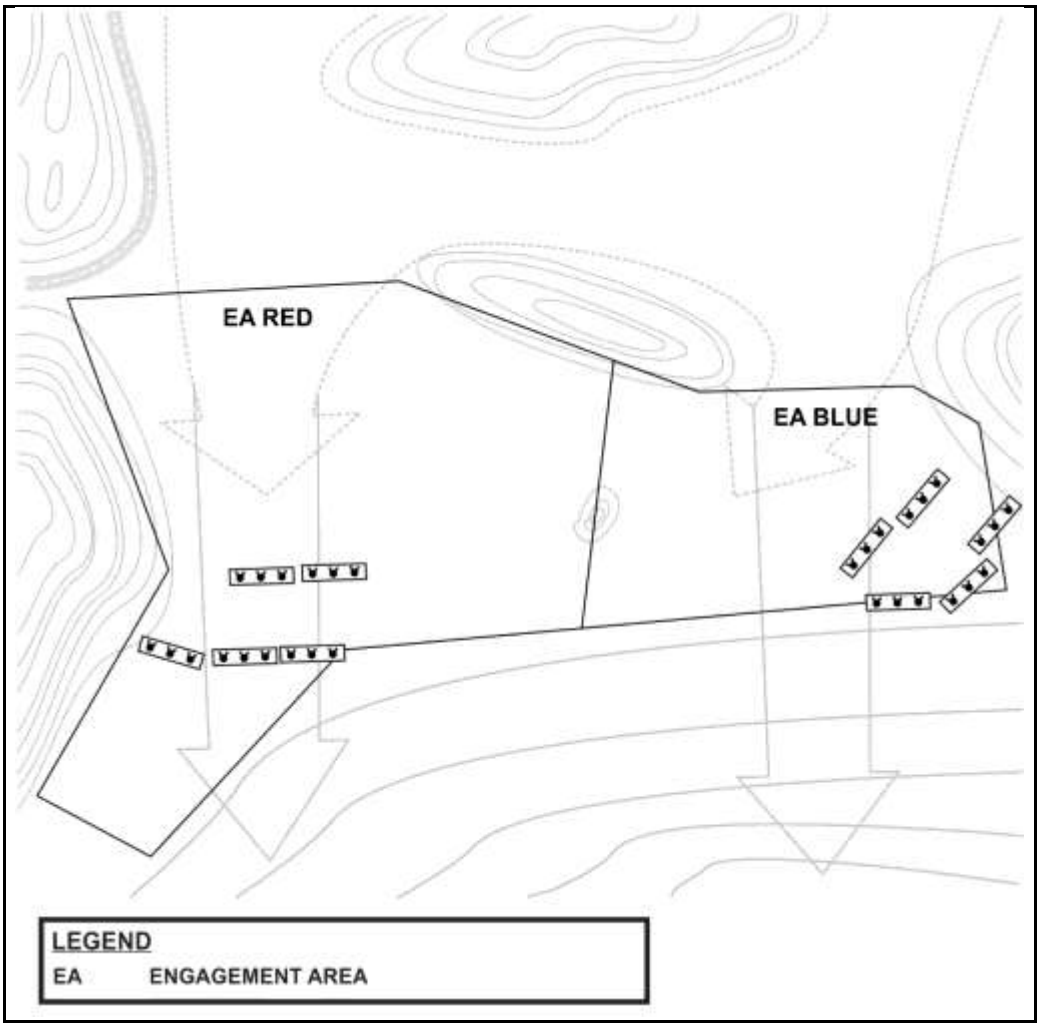

Figure 3-5. Plan for integration of obstacles

EMPLACE WEAPON SYSTEMS

3-96. The following steps apply in selecting and improving BPs and emplacing the company vehicles, crew-served weapon systems, and Infantry positions. (See figure 3-6 on page 3-19.) The company commander—

- Selects tentative platoon BPs. When possible, these should be selected while moving in the EA. Using the enemy's perspective enables the commander to assess survivability of the positions.
- Conducts a leader's reconnaissance of the tentative BPs.
- Drives the EA to confirm that selected positions are tactically advantageous.
- Confirms and marks selected BPs.
- Ensures that BPs do not conflict with those of adjacent units and that they are effectively tied in with adjacent positions.
- Selects primary, alternate, and supplementary positions to achieve the desire effect for each TRP.
- Ensures that PLs, PSGs, vehicle commanders, or Infantry squad leaders position weapon systems so that each TRP is effectively covered by the required number of weapons, vehicles, or platoons.
- Ensures that positions allow vehicle commanders, loaders, or gunners (as applicable for each vehicle) to observe the EA from the turret-down position and engages enemy forces from the hull down position.

- Stakes vehicle positions according to unit SOP so that engineers can dig in the positions while vehicle crews perform other tasks.
- Proofs all vehicle positions.

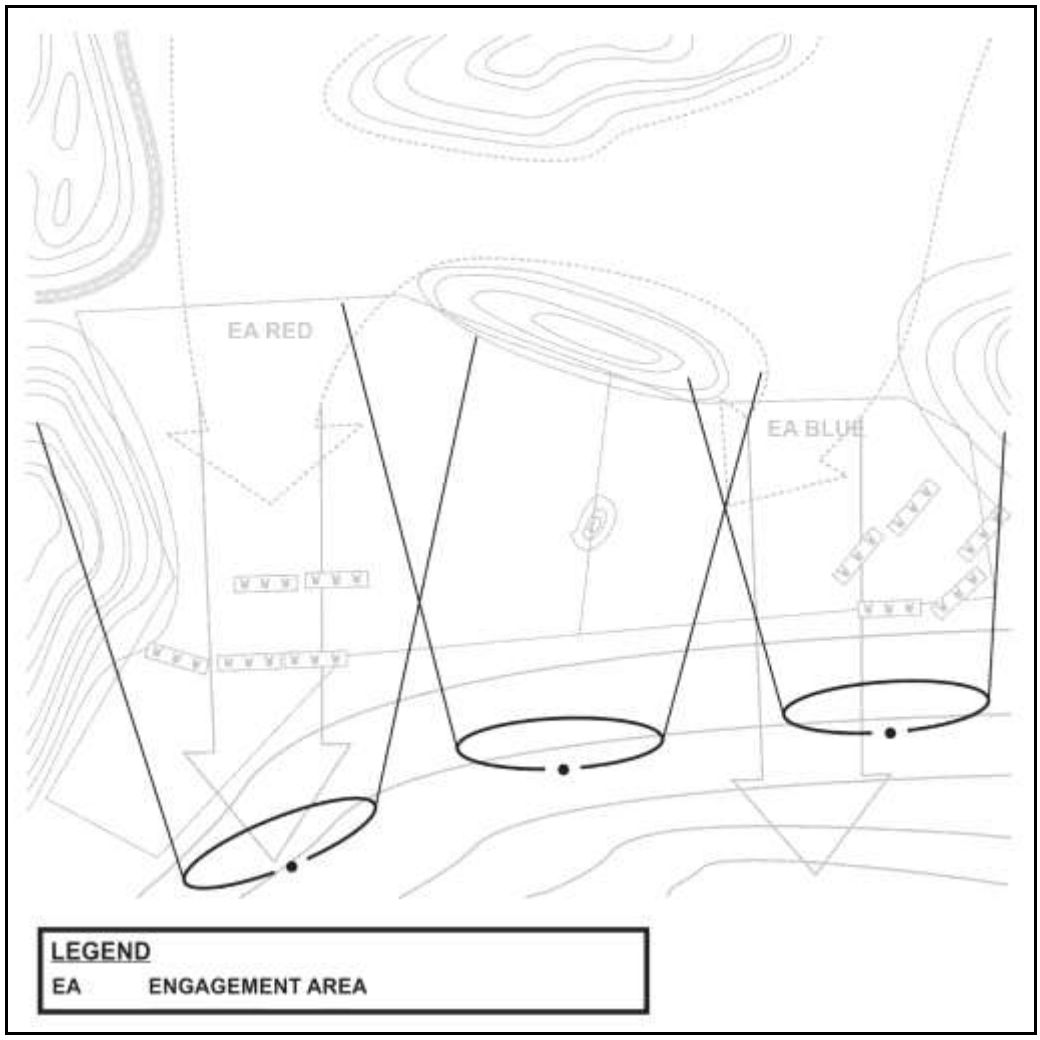

Figure 3-6. Emplacement of weapons systems

PLAN AND INTEGRATE INDIRECT FIRES

3-97. The following steps apply in planning and integrating indirect fires. (See chapter 7 in this manual for more information on Fires and Indirect Fire Planning.) (See figure 3-7.) The company commander, along with the FSO—

- Determines the task and purpose of fires.
- Determines where and how that purpose will best be achieved.
- Establishes the observation plan, with redundancy for each target. Observers include the FIST, as well as members of maneuver elements with fire support responsibilities.
- Establishes triggers based on enemy rate of movement.
- Obtains accurate target locations using survey and navigational equipment.
- Refines target locations to ensure coverage of obstacles.
- Adjusts artillery and mortar targets.
- Plans FPF.

- Requests critical friendly zone for protection of maneuver elements and no-fire areas for protection of OPs and forward positions.

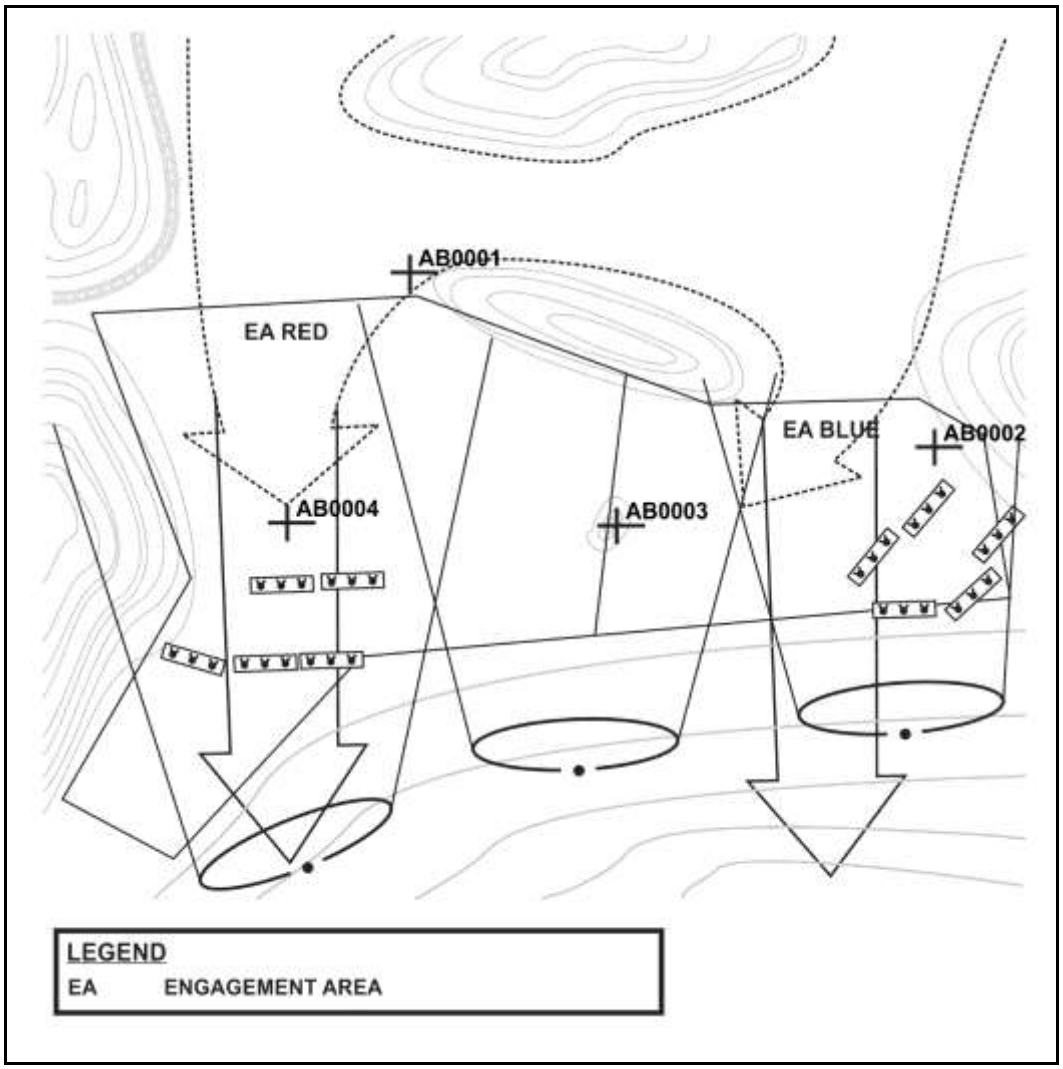

Figure 3-7. Integration of direct and indirect fires

REHEARSE EXECUTION OF OPERATIONS IN ENGAGEMENT AREA

3-98. The rehearsal ensures that every leader and Soldier understands the plan and that elements are prepared to cover their assigned areas with direct and indirect fires. Although the company commander has several options, the most common and most effective type is the mounted rehearsal. One technique for the mounted rehearsal in the defense is to have the company team trains, under the control of the XO, move through the EA to depict the enemy force. Meanwhile, the commander and subordinate platoons rehearse the battle from the company BP. The rehearsal should cover the following actions:

- Rearward passage of security forces (as required).
- Closure of lanes (as required).
- Movement from the hide position to the BP.
- Use of fire commands, triggers, or maximum engagement lines (MELs) to initiate direct and indirect fires.
- Shifting of fires to refocus and redistribute fire effects.

- Preparation and transmission of critical reports using frequency modulation and digital systems (as applicable).
- Assessment of the effects of enemy weapon systems.
- Displacement to alternate, supplementary, or subsequent BPs.
- Cross-leveling or resupply of Class V.
- Evacuation of casualties.

3-99. The company commander should coordinate the rehearsal with higher command to ensure that other units' rehearsals do not conflict with his own. Coordination leads to more efficient use of planning and preparation time for all units. It eliminates the danger of misidentification of friendly forces in the rehearsal area, which could result in fratricide.

PRIORITY OF WORK

3-100. Priority of work is a set method of controlling the preparation and conduct of a defense. The SOP's definition of "priority of work" should include individual duties. The company team commander changes priorities based on the situation. All leaders in the company team should have a specific priority of work for their duty position. Although listed in sequence, several tasks are performed at the same time. An example priority of work sequence is as follows:

- Post local security.
- Establish the company reconnaissance and surveillance operation.
- Position vehicles, Javelins, machine guns, and Soldiers; assign sectors of fire.
- Position other assets (for example, company command post, mortars and company trains).
- Designate final protective lines and final protective fires.
- Clear fields of fire and prepare range cards and sector sketches.
- Adjust indirect fire FPFs. The firing unit FDC should provide a safety box that is clear of all friendly units before firing any adjusting rounds.
- Prepare fighting positions.
- Install wire communications, if applicable.
- Emplace obstacles and mines.
- Mark (or improve marking for) TRPs and direct fire-control measures (day/night).
- Improve primary fighting positions such as overhead cover.
- Prepare alternate and supplementary positions.
- Establish a sleep and rest plan.
- Reconnoiter movements.
- Rehearse engagements and disengagements or displacements (day/night).
- Adjust positions and control measures as required.
- Stockpile ammunition, food, and water.
- Dig trenches between positions.
- Reconnoiter routes.
- Continue to improve positions.

SECTION IV – TRANSITIONS

3-101. During planning for any operation, the commander must discern from the higher headquarter's OPORD what the potential follow-on missions are and plan how they intend to achieve them. The company must consolidate and reorganize before the next operation. If required, the commander decides the best time and location that facilitates future operations and provides protection. (Refer to ADRP 3-90 for more information.)

CONSOLIDATION

3-102. The company commander uses TLP to plan and prepare for this phase of the operation. He ensures that the company conducts the following actions that usually are part of consolidation:

- Eliminates enemy resistance on the objective.
- Establishes security beyond the objective by securing areas that may be the source of enemy direct fires or enemy artillery observation.
- Establishes additional security measures such as OPs and patrols.
- Prepares for and assists the passage of follow-on forces (if required).
- Improves security by conducting other necessary defensive actions, including EA development, direct fire planning, and BP preparation.
- Adjusts FPF and register targets along likely mounted and dismounted avenues of approach.
- Protects the obstacle reduction effort.
- Secures detainees.
- Prepares for the enemy counterattack.

REORGANIZATION

3-103. Reorganization usually is conducted concurrently with consolidation. It comprises actions taken to prepare the company for follow-on operations. As with consolidation, the company commander plans and prepares for reorganization as he conducts his TLP. He ensures that the company takes the following actions:

- Provides essential medical treatment and evacuate casualties, as needed.
- Treats and evacuates wounded detainees and process the remainder of detainees.
- Cross-levels personnel and adjusts task organization as required to support the next phase or mission.
- Conducts resupply operations, including rearming and refueling.
- Redistributes ammunition.
- Conducts required maintenance.
- Improves BPs, as needed.

CONTINUING OPERATIONS

3-104. At the conclusion of an engagement, the company team may continue the defense, or if ordered, transition to offense or operations focused on stability tasks. The commander considers the higher commander's concept of operations, friendly capabilities, and enemy situation when making this decision. All missions should include plans for exploiting success or assuming a defense.

3-105. A defending commander transitions from defense to retrograde as a part of continuing operations. A retrograde usually involves a combination of delay, withdraw, and retirement operations. These operations may occur simultaneously or sequentially. As in other operations, the commander's concept of operations and intent drive planning for retrograde operations. Each form of retrograde operation has its unique planning considerations, but considerations common to all retrograde operations are risk, the need for synchronization, and rear operations.

Chapter 4

Stability

Stability tasks promote and protect U.S. national interests by influencing the threat, political, and information dimensions of the OE. This is done through peacetime developmental, cooperative activities and coercive actions in response to crisis. Stability tasks facilitate reconciliation among local or regional adversaries; establish political, legal, social, and economic institutions; and facilitate the transition of responsibility to a legitimate civil authority. Through operations focused on stability tasks, military forces help set conditions that enable other instruments of national power to achieve conflict transformation. A company is not independently capable of achieving all desired end states of operations focused on stability tasks. A company supports these operations by performing tasks at their own level that support higher headquarter's goals. These goals are designed to maintain or reestablish a safe and secure environment, restore essential governmental services, and provide emergency infrastructure reconstruction, and humanitarian relief.

SECTION I –STABILITY OVERVIEW

4-1. Ideally, the unit receives advance notice of stability tasks that they are being assigned and have time to plan and execute a focused training program before deploying. At other times the company team may conduct offensive and defensive tasks initially with the goal to transition to stability tasks once the necessary conditions have been achieved. In those cases, the unit relies on its training in the fundamental warfighting functions and trains to specific mission based on the conditions in the phases of stability the operation takes place.

PHASES OF STABILITY

4-2. Stability is a constant process of improvement and degrading conditions but has distinction described in its phases. The phases of stability assist the commander to in preparation for conducting operations. The ability to distinguish what conditions separate each phase of stability layout the milestones that can be achieved for progress.

INITIAL RESPONSE PHASE

4-3. These actions generally reflect activities to stabilize an area of operations. The ABCT typically performs initial response actions during, or directly after, a conflict or disaster in which the security situation prohibits the introduction of civilian personnel. Initial response actions aim to provide a secure environment that allows relief forces to attend to the immediate humanitarian needs of the local population.

TRANSFORMATION PHASE

4-4. Stabilization, reconstruction, and capacity-building are transformation phase actions that are performed in a relatively secure environment. Transformation phase actions may take place in either crisis or vulnerable states and aim to build host-nation capacity across multiple sectors.

FOSTERING SUSTAINABILITY PHASE

4-5. Military forces perform fostering sustainability phase actions when the security environment is stable enough to support efforts to implement the long-term programs that commit to the viability of the institutions and economy of the host nation. These actions capitalize on capacity building reconstruction activities to enable sustainable development. Often military forces conduct these long-term efforts in support of broader, civilian-led efforts

SECTION II – STABILITY PRINCIPLES

4-6. The CAB applies stability principles to determine what actions to take, how to array its forces, and what guidance to give its subordinate units. For the company team, stability principles are nested with the higher commanders' intent addressing the purpose for conducting actions to provide a stable environment.

CONFLICT TRANSFORMATION

4-7. *Conflict transformation* is the process of converting the actors and conditions that motivate violent conflict into the governmental process to address the causes of instability (ADRP 3-07). It aims to set the host nation on a sustainable, positive trajectory in which transformational processes directly address the dynamics causing instability.

UNITY OF EFFORT

4-8. *Unity of effort* is the coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization—and is the product of successful unified action (JP 1). Military operations typically demand unity of command, the challenge for military and civilian leaders is to forge unity of effort or unity of purpose among the diverse array of actors involved in stability operation. This is the essence of *unified action*: the synchronization, coordination, and integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1). Unity of effort is fundamental to successfully incorporating all the instruments of national power in a collaborative approach when conducting stability tasks in operations.

4-9. Unity of effort is more than working with other U.S. governmental agencies. Political leaders, governmental agencies, security forces, and local businesses are examples of host-nation actors that a brigade works with during stability operations. Brigades leverage their relationships with host-nation actors to develop their understanding of the operational environment and to answer information requirements.

LEGITIMACY AND HOST-NATION OWNERSHIP

4-10. Legitimacy is a condition based upon the perception by specific audiences of the legality, morality, or rightness of a set of actions, and of the propriety of the authority of the individuals or organizations in taking them. Host nation ownership is the will or ability of the ruling entity to resolve its own problems and assuming responsibility for solutions that it supports and can implement. Legitimacy enables host-nation ownership by building trust and confidence among the people. The principle of legitimacy impacts every aspect of operations from every conceivable perspective.

BUILDING PARTNER CAPACITY

4-11. Building partner capacity is the outcome of comprehensive inter-organizational activities, programs, and military-to-military engagements that enhance the ability of partners to establish security, governance, economic development, essential services, rule of law, and other critical government functions. Brigades working with their partnered organizations, apply a comprehensive and unified approach to co-develop mutually beneficial capabilities and capacities that address shared interests.

RULE OF LAW

4-12. Rule of law is a principle under which all persons, institutions, and entities, public and private, including the state itself, are accountable to laws that are publicly promulgated, equally enforced, and independently adjudicated, and that are consistent with international human rights principles. Successful

stability efforts ultimately depend on fairness applied through the rule of law. The CAB assists in enforcing the rule of law according to political objectives and agreements with unified action partners. The CAB must incorporate the rule of law into their approach to military operations and objectives and ROE.

SECTION III – STABILITY TASKS

4-13. Each stability tasks support one another when actions are conducted by civil and military organizations and key actors. Progress of regress in one of the stability tasks effect the each with an operating environment. The stability tasks are—

- Establish civil security.
- Establish civil control.
- Support to governance.
- Restore essential services.
- Support to economic and infrastructure development.

4-14. Each stability task is nested closely in its application of stability by civil and military organizations and key actors. (See figure 4-1.)

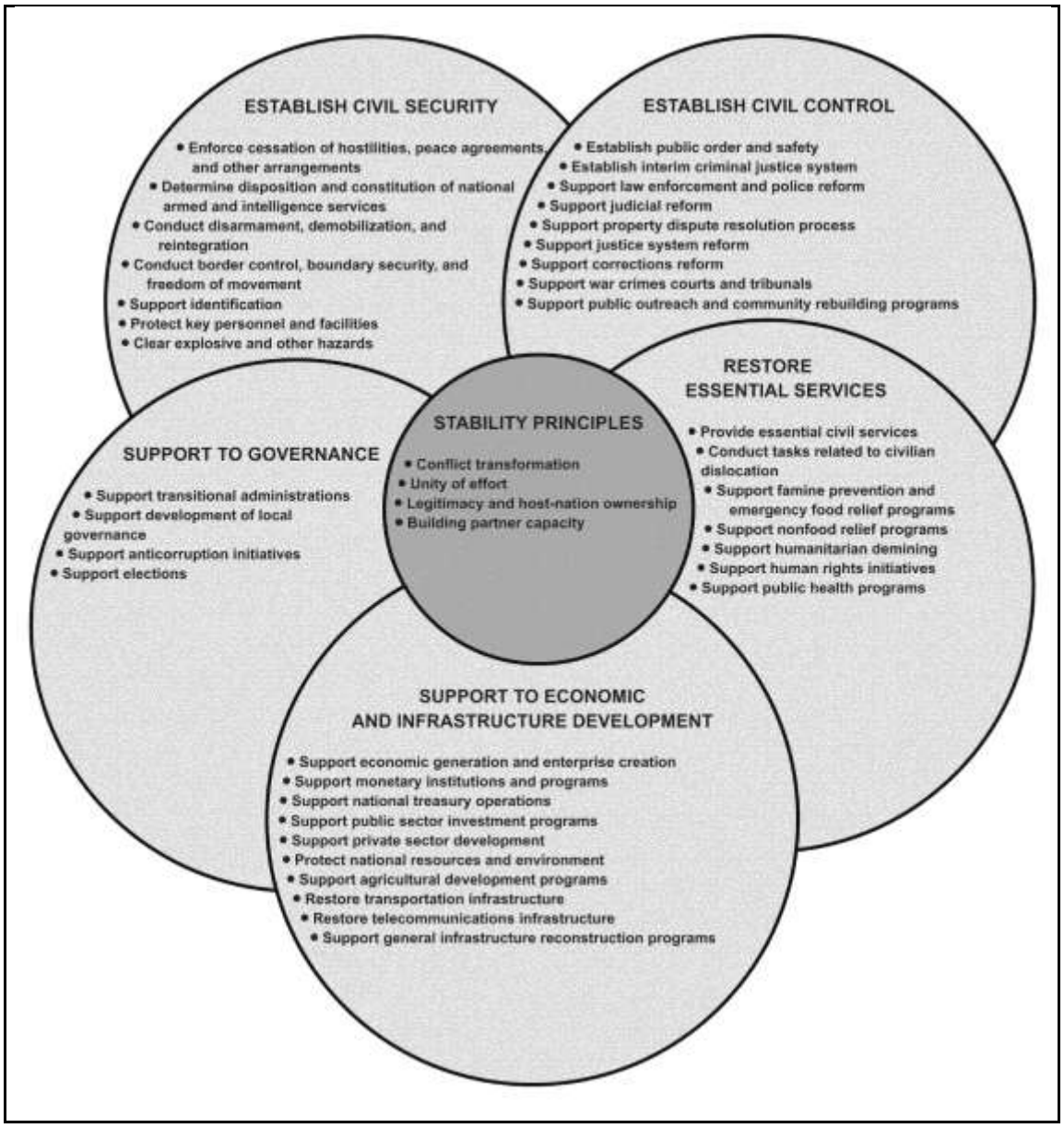

Figure 4-1. Stability principles and tasks

4-15. Stability tasks vary by the operational (PMESII-PT) and mission variables (METT-TC) present in the operational environment. The company team performs many familiar core tactical missions and tasks during stability tasks. The purposes of operations, the special constraints on commanders, and the unique missions and tasks, however, differentiate stability tasks from other operations

4-16. The combination of tasks conducted during stability tasks depends on the situation. In some operations, the HN can meet some or all of the population's requirements. In those cases, Army forces work with and through HN authorities. Conversely, Army forces operating in a failed state may be responsible for the well-being of the local populace. That situation requires Army forces to work with civilian agencies to restore basic capabilities.

4-17. As offensive tasks clear areas of hostile forces, part of the force secures critical infrastructure and populated areas. Establishing civil security and essential services are implied tasks for commanders during any combat operation. Commanders are legally obligated under the law of armed conflict to minimize and

relieve civilian suffering. However, if a unit is decisively engaged in combat operations, the law of armed conflict does not require complete diversion from its mission to perform stability tasks.

4-18. Commanders must plan to minimize the effects of combat on the populace. Properly focused, effectively executed stability tasks prevent population centers from degenerating into civil unrest and becoming recruiting areas for opposition movements or insurgencies.

4-19. Army forces conduct the following five primary stability tasks: establish civil security, establish civil control, restore essential services, support to governance, and support to economic and infrastructure development. At the brigade level and below, the primary stability tasks are too broad to focus effort appropriately; at lower tactical echelons, lines of effort are best designed using core or directed mission-essential tasks. Lines of effort may focus on specific aspects of the local situation, such as the restoration of essential civil services. The activities of military forces are often shaped using lines of effort based on sewage, water, electricity, academics, trash, medical, security, and other considerations (SWEAT-MSO), while addressing the need to provide food, aid, and shelter.

ESTABLISH CIVIL SECURITY

4-20. A safe and secure environment is essential for the HN and its population. Establishing civil security helps provide this environment, including protection from internal and external threats. Civil security includes a diverse set of activities, ranging from enforcing peace agreements to conducting disarmament, demobilization, and reintegration.

4-21. Security force assistance is the unified action to generate, employ, and sustain local, HN, or regional security forces in support of a legitimate authority. It is integral to successful operations focused on stability tasks and extends to all security forces. Forces are developed to operate across the range of military operations—combating internal threats (such as insurgency, subversion, and lawlessness; defending against external threats; or serving as coalition partners in other areas). Security force assistance at the company team requires the unit to conduct these actions: advise, teach, mentor, and augment.

4-22. Until a legitimate civil government can assume responsibility for the security sector, military forces perform the tasks associated with civil security. At the same time, they help develop HN security and police forces. Normally, the responsibility for establishing and maintaining civil security belongs to military forces from the onset of operations through transition, at which time the HN security and police forces assume this role.

ESTABLISH CIVIL CONTROL

4-23. Establishing civil control is an initial step toward instituting rule of law and establishing stable, effective governance. Although establishing civil security is the first responsibility of military forces in an operation focused on stability tasks, this can only be accomplished by establishing civil control. Internal threats may manifest themselves as an insurgency, subversive elements within the population, organized crime, or general lawlessness.

4-24. Civil control regulates selected behavior and activities of individuals and groups. This control reduces risk to individuals or groups and promotes security. Curfews and traffic checkpoints are examples of civil control.

RESTORE ESSENTIAL SERVICES

4-25. The company team is capable of providing only the most essential services. Normally, the CAB supports other government, intergovernmental, and HN agencies. Essential services include the following:

- Ensuring emergency medical care and rescue.
- Providing food and drinking water.
- Providing emergency shelter.

SUPPORT TO GOVERNANCE

4-26. Operations focused on stability tasks establish conditions that enable interagency and HN actions to succeed. The CAB commander focuses on transferring control to a legitimate civil authority according to the

desired end state. The company team, as part of larger unit, can provide support to governance that could include the following:

- Checkpoints to regulate traffic and searches for smuggled contraband.
- Properly detaining suspected criminals and properly holding criminal evidence for the HN's civil administration of justice.
- Training HN security forces and police.
- Security at election sites and ballot transfers.

SUPPORT TO ECONOMIC AND INFRASTRUCTURE DEVELOPMENT

4-27. Support to economic and infrastructure development helps a HN develop capability and capacity in these areas. It may involve direct and indirect military assistance to local, regional, and national entities. Company teams are capable of coordinating with local officials/leaders to fund limited projects using a commander's emergency response program. These limited projects can support the local economy and assist with rebuilding the local infrastructure.

SECTION IV – PLANNING CONSIDERATIONS

4-28. Stability tasks tend to be decentralized and conducted over extended distances, except specific actions undertaken in combating terrorism, support to counterdrug operations, and noncombatant evacuation operations. As decentralized operations, the units' activities consist largely of separated small unit operations conducted across an assigned sector or AO.

SITUATIONAL UNDERSTANDING

4-29. Planning helps the commander decide and act more effectively in an uncertain and complex environment. Effective planning demonstrates imagination rather than an overreliance on mechanics. Fundamentally, planning struggles to reconcile tension between the desire for preparation and the need for flexibility in recognizing the uncertainty of war.

4-30. The execution of stability tasks presents a unique challenge. Where combat typically focuses on the defeat of an enemy force, stability focuses on people. In setting the tone for planning, the commander provides the following:

- Understanding.
- Commander's intent and planning guidance.
- Concept of operations.

4-31. The commander must clearly understand the mission and the situation, and he must ensure his subordinate units understand them as well. He must plan for continuous operations, and, as with offensive and defensive tasks, planning and preparation time is often limited. The plan must facilitate adjustment based on changes in the situation.

UNIT INTEGRATION

4-32. When operating inside a multinational organization, commanders should expect to integrate units down to the company level for combat units and to the individual level for support units. Commanders should train with this reality in mind. Units operate under established procedures modified to agree with the standard operating procedures for the alliance or coalition. It is accepted that effectiveness initially decreases when operating in a multinational force, but through training and understanding of standards and procedures, unit performance will improve.

INTERORGANIZATIONAL COORDINATION

4-33. One factor that distinguishes stability tasks from offensive and defensive tasks is the requirement for interorganizational coordination at the battalion-level and below. In interorganizational operations, Army commanders have inherent responsibilities including the requirements to clarify the mission; to determine

the controlling legal and policy authorities; and to task, organize, direct, sustain, and care for the organizations and individuals for whom they provide the interagency effort. They also assure seamless termination under conditions that ensure the identified objectives are met and can be sustained after the operation.

BUILDING RELATIONSHIPS

4-34. Success in stability tasks is often defined by the quality of relationships developed between the company team and host nation security forces, government officials, and key opinion makers. Additionally, partnership with multinational, interagency and nongovernmental factors will often force commanders to adjust to ambiguous command and control relationships. Commanders define the role and scope of the unit mission up front and then establish clearly understood engagement strategies that include a clear narrative nested with the higher commander's intent and a clear delineation of responsibilities for meeting with key leaders within the operating environment. This prevents confusion among host nation leaders about who they should talk to in the security force and the overall message and purpose of actions within the ABCT.

SOLDIER AND LEADER ENGAGEMENT

4-35. *Soldier and leader engagement* is interpersonal interactions by soldiers and leaders with audiences in an area of operations (FM 3-13). It can occur as an opportunity, a face-to-face encounter on the street, or a scheduled meeting. This interaction can also occur via telephone calls, video teleconferences, or other audiovisual mediums. Soldiers and leaders conduct this engagement to provide information or to influence attitudes, perceptions, and behavior. This engagement provides a venue for building relationships, solving conflicts, conveying information, calming fears, and refuting rumors, lies, or incorrect information. Effectively integrating soldier and leader engagement into operations increases the potential for commanders to mitigate unintended consequences, counter adversary information activities, and increase local support for friendly forces and their collective mission. (Refer to FM 3-13 for more information.)

CIVIL AND CULTURAL CONSIDERATIONS

4-36. The elements of civil and cultural considerations help supported units and organizations understand the evolving sociocultural environment and considerations, with special focus on civilians, thereby refining decision making across a broad spectrum. The commander decides how a human terrain team supports the staff.

4-37. Civil considerations involve attaching human terrain teams to ABCTs. Civil considerations use observed sociocultural research and analysis to fill a large operational decision making support gap. This research provides current, accurate, and reliable data generated by on-the-ground research on the specific social groups. This knowledge provides a sociocultural foundation for the staff's support to the commander's military decision-making process, both in planning and execution. It enables an effective rotation of forces by creating and maintaining an enduring sociocultural knowledge base. (Refer to FM 3-13 for more information.)

SUSTAINMENT

4-38. The area the company team faces during operations focused on stability tasks may be very austere, creating special sustainment considerations. These factors include, but are not limited to, the following:

- Reliance on local procurement of certain items.
- Shortages of various critical items, including repair parts, Class IV supply materials, and lubricants.
- Special Class V supply requirements such as pepper spray.
- Reliance on bottled water.
- Class IV supplies for construction of fixed OPs and checkpoints.
- Use of existing facilities or new construction for quarters; water, sewer, and power utilities; and reinforced hardstand areas for maintenance.
- Barriers or berms to protect ammunition and fuel.
- Using female Soldiers from the FSC to assist with searching HN female suspects.

PROTECTION

4-39. Protection of the force during stability tasks is essential for success at all levels. Commanders continually balance protection needs between military forces and civil populations. Frequent interaction between U.S. forces and the local population make protection planning difficult and essential. Adversaries often blend with the local populace and are difficult to identify, making heightened levels of awareness the norm.

4-40. The close proximity of civilians and Soldiers can cause health issues (such as communicable diseases) through close contact with local civilians, detainees, or local foods. The protection of civil institutions, processes, and systems required to reach the end state can often be the most decisive factor in these operations. Their accomplishment is essential for long-term success.

4-41. Civil areas typically contain structured and prepared routes, roadways, and avenues that can canalize traffic. This can lead to predictable friendly movement patterns that can easily be 4-8efuelin by the enemy. An additional planning consideration during operations focused on stability tasks is to protect the force while using the minimum force consistent with the approved ROE. Additional protection considerations during stability operations include—

- Reducing the unexploded explosive ordnance and mine threats in the AO.
- Preventing fratricide and minimizing escalation of force incidents through combat, civilian, and coalition identification measures.
- Developing rapid and efficient personnel recovery techniques and drills.
- Clearing OPSEC procedures that account for the close proximity of civilians, nongovernmental organizations (NGOs), and contractors.
- Disciplining information management techniques to preserve access to computer networks.
- Containing toxic chemicals and materials present in the civilian environment.
- Maintaining survivability requirements for static facilities, positions, or outposts.

4-42. Commanders must implement appropriate security measures to protect the force. Establishment of checkpoints, effective base-camp security procedures, and aggressive patrolling are examples of protecting the force. Protecting the force requires special consideration in operations focused on stability tasks. This is because threats may be different and, in some cases, opposing forces seek to kill or wound U.S. Soldiers or destroy or damage property for political purposes.

4-43. Commanders must always consider the aspects of protection and how they relate to the ROE. Some examples of protective measures are as follows:

- Secure the inside perimeter if the HN secures the outside perimeter.
- Avoid becoming an easy target and do not become predictable.
- Include security in each plan, SOP, OPORD, and movement order.
- Develop specific security programs such as threat awareness and OPSEC.
- Restrict access of unassigned personnel to the unit's location.
- Maintain a constant image of professionalism and readiness.
- Base the degree of security established on a continuous threat assessment.

SECTION V – TRANSITIONS

4-44. Transitions mark a change of focus between phases or between the ongoing operation and execution of a branch or sequel. Shifting priorities between the elements of decisive actions—such as from offense to stability—involves a transition. Transitions require planning and preparation well before their execution to maintain the momentum and tempo of operations. The force is vulnerable during transitions, and commanders must establish clear conditions for their execution. Transitions may create unexpected opportunities; they may make forces vulnerable to enemy threats. (Refer to ADRP 3-07 for more information.)

TRANSITION TO OFFENSE

4-45. During operations focused on stability tasks, there may be instances where units must quickly transition back to the offense against irregular forces or the defense to defeat counterattacks. To facilitate the transition, commanders must consider an offensive contingency while conducting operations focused on stability tasks.

TRANSITION TO DEFENSE

4-46. Commanders must ensure that transitions from stability to defensive tasks and vice versa are planned. (For example, it may be tactically wise for commanders to plan a defensive contingency with on-order offensive missions for certain stability tasks that could deteriorate.) Subordinate leaders must be fully trained to recognize activities that would initiate this transition.

TRANSFER OF AUTHORITY

4-47. Often during operations focused on stability tasks, a relief in place is referred to as a transfer of authority (TOA). Besides the normal responsibilities of a relief, commanders must deal with civilians or coalition partners. During these operations, units often know when they will be relieved. Planning for the TOA begins as soon as the unit occupies the AO.

4-48. Before the TOA, the departing unit develops a continuity book with the necessary information on the AO. The book should include lessons learned, details about the populace, village and patrol reports, updated maps and photographs, and anything else that helps newcomers master the company team's OE. Computerized databases are suitable. Commanders should ensure that these continuity books are updated during the unit's tour of duty. This extensive effort reduces casualties and increase the current and succeeding units' efficiency and knowledge of operations.

4-49. A consistent theme from recent operations is the importance of the transition training (right seat/left seat rides) with incoming Soldiers during TOA. A detailed and programmed TOA allows Soldiers to learn the culture and effectively work with HN personnel during the deployment. Typical training during the relief includes—

- Theater-unique equipment not available before TOA.
- Enemy TTPs for improvised explosive devices (IEDs).
- Personal meetings with NGOs, contractors, interpreters, informants, and local HN police and local HN governing officials and agencies that operate in the unit AO.
- Negotiation techniques with local tribal, religious, and government officials.

TRANSITION TO CIVILIAN/HN SECURITY FORCE CONTROL

4-50. During long-term security force assistance, conditions determine the rotation of in-theater units. Time is not the only governing factor. The overall authority for the handoff and the subsequent transfer of authority lies with the commander ordering the change. The authority for determining the handoff process lies with the incoming commander assuming responsibility for the mission. This changeover process may affect conditions under which the mission will continue.

4-51. Changes in the OE may require reshaping force packages as situations change. Internal administrative concerns might prompt or support a commander's decision to rotate units. Regardless, mission handoff is necessary and defined as the process of passing an ongoing mission from one unit to another with no discernible loss of continuity.

4-52. Although intended for a direct handoff between U.S. units, commanders must make specific considerations when making a handoff to a multinational force. Considerations include mission variables. For units relieved of a function by a government agency, procedures typically entail longer handoff times and more complex coordination. However, the other areas of consideration still apply and may in fact be a greater issue for an agency. Outgoing units that have past, present, or future projects planned with agencies prepare to transfer these projects to responsible agents in the incoming unit.

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Chapter 5

Enabling Tasks and Activities

Enabling tasks are specialized missions that units plan and conduct to seize or retain a tactical advantage. Units execute these operations as part of the offense, defense, or operations focused on stability tasks. The fluid nature of the modern battlefield increases the frequency with which the company team conducts these enabling operations. This chapter establishes techniques and procedures that the company team can apply to these specialized missions. This chapter discusses security, reconnaissance, patrols, troop movement, relief in place, passage of lines, linkup operations, AA operations, breaching operations, and gap crossings.

SECTION I – SECURITY

5-1. This section discusses security operations including the five fundamentals of security.

SECURITY OPERATIONS

5-2. *Security operations* are those operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90). Security operations enable the commander to detect enemy operations, protect another unit, and develop the situation. Security operations include reconnaissance aimed at reducing terrain and enemy unknowns; gaining and maintaining contact with the enemy to ensure continuous information; and providing early and accurate reporting of combat information to the protected force. Security forces orient in any direction from a stationary or moving force. (Refer to ADRP 3-90 for more information.)

5-3. Counterreconnaissance is an essential component of security operations. The security force should deny the enemy intelligence information concerning the friendly force. The security force accomplishes this by destroying, defeating, or deceiving enemy reconnaissance units and sensors according to engagement criteria and the ROE.

5-4. Security operations encompass five tasks—screen, guard, cover, area security, and local security.

- *Screen* is a security task that primarily provides early warning to the protected force (ADRP 3-90).
- *Guard* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body (ADRP 3-90).
- *Cover* is a security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body (ADRP 3-90).
- *Area security* is a security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADRP 3-90).
- *Local security* is a security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy (ADRP 3-90).

5-5. Screen, guard, and cover, respectively, contain increasing levels of combat power and provide increasing levels of security for the main body. However, more combat power in the security force means less for the main body. Area security preserves the commander's freedom to move his reserves, position fire support means, provide for mission command, and conduct sustaining operations. Local security provides immediate protection to his forces.

5-6. The company team cannot conduct screen or guard operations without external augmentation. The company team can only participate in covering force operations as part of a larger element. It can conduct area security missions on its own, but will usually participate as part of a CAB area security force. All forces, including the company team, must provide their own local security. Local security includes OPs, security patrols, perimeter security, and other close-in measures.

FUNDAMENTALS OF SECURITY OPERATIONS

5-7. The five fundamentals of security operations are—

- Provide early and accurate warning.
- Provide reaction time and maneuver space.
- Orient on the force, area, or facility to be protected.
- Perform continuous reconnaissance.
- Maintain enemy contact.

PROVIDE EARLY AND ACCURATE WARNING

5-8. The security force provides early, accurate warning by detecting the threat force quickly and reporting information accurately to the commander. Early warning of threat activity provides the commander with the time, space, and information he needs to retain the tactical initiative and to choose the time and place to concentrate against the threat. At a minimum, the security force should operate far enough from the main body to prevent enemy ground forces from observing or engaging the main body with direct fire. Position maneuver forces, sensors, and tactical unmanned aircraft system (UAS) to provide long-range observation of expected threat avenues of approach.

5-9. In operations focused on stability tasks, providing early and accurate warning is much harder to achieve. In many cases, threat personnel in the AO are indistinguishable from civilian noncombatants; they might elude positive identification as a threat until their actions reveal them as such. This fundamental may be expressed in the environment in the following ways:

- Identification of and regular communication with key civil and religious leaders.
- Continuous surveillance of known or suspected terrorist meeting locations.
- Proactive, friendly engagement with the indigenous population to ascertain threat developments in their community that may otherwise be transparent to the unit

PROVIDE REACTION TIME AND MANEUVER SPACE

5-10. The security force operates as far from the protected force as possible within supporting range of the protected force, consistent with mission variables. More distance usually yields greater reaction time and maneuver space for the protected force commander, provided that communications are maintained. The security force fights as necessary to gain and retain adequate time and space for the protected force commander, allowing him to maneuver and concentrate forces to counter the threat.

ORIENT ON FORCE, AREA, OR FACILITY TO BE PROTECTED

5-11. The security force focuses all actions to protect the secured force, area, or facility and provide maximum early warning of threat activity. It operates between the main body and known or suspected enemy units. The security force must move as the main body moves and orient on its movement. The security force commander must know the main body's scheme of maneuver to maneuver his force so that it remains between the main body and the enemy. The value of terrain occupied by the security force depends on the operational area security it provides to the main body commander.

5-12. In operations focused on stability tasks, the security force should orient on the routes or areas where ambushes, snipers, and mortar attacks have frequently occurred. They could focus on locations where IEDs or other explosive hazards have been repeatedly used. Another example is the security force that orients surveillance on the offices occupied by a newly seated foreign government whose legitimacy may be contested and targeted for violence by threat factions.

PERFORM CONTINUOUS RECONNAISSANCE

5-13. Security comes in large part from knowing as much as possible about the threat and terrain within the assigned AO. This detailed knowledge results from ongoing, focused reconnaissance that aggressively and continuously reconnoiters key terrain; seeks the location, composition, and disposition of the threat; and determines the threat's COA early so that the company team can counter it. Stationary security forces use combinations of OPs, UAS, patrols, and other information collection assets to perform continuous reconnaissance. Moving security forces accomplishes this fundamental by performing area, zone, or route reconnaissance in conjunction with temporary OPs and BPs.

5-14. In operations focused on stability tasks, units conduct continuous reconnaissance with patrols, UAS, and urban OPs that keep a specific location under observation for extended periods. Additionally, reconnaissance may be linked to specific route clearance operations.

MAINTAIN ENEMY CONTACT

5-15. Once gained, contact is not broken unless otherwise directed. The individual or sensor that first makes contact does not have to maintain it; however, the security force, collectively, must maintain contact. The security force must continuously gather information on the threat's activities and prevent the threat from surprising the main body or endangering adjacent friendly forces.

5-16. The fundamentals of maintaining enemy contact require—

- Continuous contact (visual, electronic, sensor, or a combination).
- Capability to use direct and indirect fires.
- Freedom to maneuver.
- Depth (of observers in time and space).

SCREEN

5-17. A screen primarily provides early warning by observing, identifying, and reporting enemy actions. Generally, a screening force engages and destroys enemy reconnaissance elements within its capabilities, but otherwise fights only in self-defense.

5-18. A screen is appropriate to cover gaps between forces, the exposed flanks or rear of stationary and moving forces, or the front of a stationary formation. Units use screens when the likelihood of enemy contact is remote, the expected enemy force is small, or the friendly main body needs only a minimum amount of time, once it is warned to react effectively. Units usually accomplish screening by establishing a series of OPs and conducting patrols to ensure adequate surveillance of the assigned sector.

5-19. The following are screen tasks:

- Allow no enemy ground element to pass through the screen undetected and unreported.
- Maintain continuous surveillance of all avenues of approach larger than a designated size into the area under all visibility conditions.
- Destroy or repel all enemy reconnaissance patrols within its capabilities.
- Locate the lead elements of each enemy advance guard and determine its direction of movement in a defensive screen.
- Maintain contact with enemy forces and report any activity in the AO.
- Maintain contact with the main body and any security forces operating on its flanks.
- Impede and harass the enemy within its capabilities while displacing.

GUARD

5-20. A guard differs from a screen in that a guard force contains sufficient combat power to defeat, cause the withdrawal of, or fix the lead elements of an enemy ground force before it can engage the main body with direct fire. A guard force routinely engages enemy forces with direct and indirect fires. A screening force, however, primarily uses indirect fires or close air support to destroy enemy reconnaissance elements and slow the movement of other enemy forces. A guard force uses all means at its disposal, including decisive engagement, to prevent the enemy from penetrating to a position where it could observe and engage the main

body. It operates within the range of the main body's fire support weapons, deploying over a narrower front than a comparable-size screening force to permit concentrating combat power.

5-21. The three types of guard operations are advance, flank, and rear. A commander can assign a guard mission to protect either a stationary or a moving force.

5-22. The advance guard is responsible for clearing the axis of advance or designated portions of the AO of enemy elements. This allows the main body to move unimpeded, prevents the unnecessary delay of the main body, and defers the deployment of the main body for as long as possible. An advance guard for a stationary force is defensive in nature. It defends or delays according to the main body commander's intent. An advance guard for a moving force is offensive in nature and normally conducts a MTC.

5-23. The flank guard protects against an exposed flank of the main body. The commander of the main body designates the general location of the flank guard's positions. Aos assigned to the flank guard should be sufficiently deep to provide early warning and reaction time. However, flank guards must remain within supporting range of the main body.

5-24. The rear guard protects the exposed rear of the main body. This occurs during offensive tasks when the main body breaks contact with flanking forces or during a retrograde. The commander may deploy a rear guard behind both moving and stationary main bodies. The rear guard for a moving force displaces to successive BPs along PLs or delay lines in depth as the main body moves. The nature of enemy contact determines the exact movement method or combination of methods used in the displacement (successive bounds, alternate bounds, and continuous marching).

5-25. A unit conducting a guard performs certain tasks within its capabilities unless ordered otherwise. If a unit does not have the time or other resources to complete all of these tasks, it must inform the commander assigning the mission of the shortfall and request guidance on which tasks to complete or the priority of tasks. After starting the guard, if the unit determines that it cannot complete an assigned task, such as cause deployment of the enemy advance guard, it must report this to the commander and await further instructions.

5-26. The following are guard tasks:

- Destroy the enemy advance guard.
- Maintain contact with enemy forces and report activity in the AO.
- Maintain continuous surveillance of avenues of approach into the AO under all visibility conditions.
- Impede and harass the enemy within its capabilities while displacing.
- Cause the enemy main body to deploy, and then report its direction of travel.
- Allow no enemy ground element to pass through the security area undetected and unreported.
- Destroy or cause the withdrawal of all enemy reconnaissance patrols.
- Maintain contact with its main body and any other security forces operating on its flanks.

5-27. A commander employs a guard when the expected enemy contact requires additional security beyond that provided by a screen. The multiple requirements of the guard mission are often performed simultaneously over relatively large areas. The guard force's exact size is determined by prevailing mission variables.

COVER

5-28. The covering force's distance forward of the main body depends on the intentions and instructions of the main body commander, the terrain, the location and strength of the enemy, and the rates of march of both the main body and the covering force. The width of the covering force area is the same as the AO of the main body.

5-29. The *covering force* is a self-contained force capable of operating independently of the main body, unlike a screening or guard force to conduct the cover task (FM 3-90-2). The covering force, or portions of it, often becomes decisively engaged with enemy forces. Therefore, the covering force must have substantial combat power to engage the enemy and accomplish its mission. The company team may participate in covering force operations but does not conduct them on its own. The covering force develops the situation earlier than a screen or a guard force. It fights longer and more often and defeats larger enemy forces.

5-30. While the covering force provides more security than a screen or guard force, it requires more resources. Before assigning a cover mission, the main body commander must determine if there is sufficient combat power to resource the covering force and the decisive operation. When the commander lacks the resources to support both, the main body commander must assign the security force a less resource intensive security mission, either a screen or a guard.

5-31. The covering force accomplishes all the tasks of screening and guard forces. The covering force for a stationary force performs a defensive mission, while the covering force for a moving force generally conducts offensive actions. The covering force normally operates forward of the main body in the offense or defense, or to the rear for a retrograde operation. Unusual circumstances could dictate a flank covering force, but this is normally a screen or guard mission.

AREA SECURITY

5-32. Area security operations may be offensive or defensive in nature. They focus on the protected force, installation, route, or area. Forces to protect range from echelon headquarters through artillery and echelon reserves to the sustaining base. Protected installations can be part of the sustaining base or they can constitute part of the area's infrastructure. Areas to secure range from specific points (bridges and defiles) and terrain features (ridge lines and hills) to large population centers and their adjacent areas. The company team can conduct an area security operation independently or as part of a CAB operation.

5-33. Area security operations can require the execution of a wide variety of supporting operations and tasks. Depending on mission variables, the company team might require augmentation to conduct area security effectively. Infantry units can expect to provide personnel augmentation to armored units to offset the limited personnel in those formations.

5-34. When conducting an area security mission, the company team prevents threat ground reconnaissance elements from directly observing friendly activities within the area being secured. It prevents threat ground maneuver forces from penetrating the defensive perimeters established by the commander. The commander may direct his subordinate platoons to employ a variety of techniques such as OPs, BPs, ambushes, and combat outposts to accomplish this security mission. A reserve or quick reaction force enables the commander to react to unforeseen contingencies. Using the assigned information collection assets available to the CAB, the company team can execute ambushes and preemptive strikes proactively and with greater precision.

5-35. An analysis of mission variables enables the commander to determine the augmentation for the company team, with particular consideration given to the need for aviation, engineers, and artillery. Early warning of threat activity is paramount when conducting area security missions and provides the commander with time and space to react to threats. Proper intelligence analysis and reconnaissance planning, coupled with dismounted and mounted patrols and aerial reconnaissance, is essential to successful operations, especially when securing fixed sites. Failure to conduct continuous reconnaissance can create a vulnerable seam through which the enemy can execute an infiltration or attack.

5-36. Most circumstances do not permit establishment of defined, neat perimeters. When a perimeter is not feasible, the company team secures the area by establishing a presence and conducting operations throughout the area. Company teams establish perimeters around base camps, critical infrastructure, and high-value assets, while other units conduct operations to establish presence, provide security, assist humanitarian operations, and conduct other stability tasks. The company can position a reaction force between several secured perimeters. Other missions or tasks in support of area security can include the following:

- Screens along zones of separation or other designated areas.
- Route or convoy security of critical lines of communication.
- Checkpoint operations to monitor or control movement.
- Demonstrations to maintain an observable presence.

LOCAL SECURITY

5-37. Local security includes measures taken by units to prevent surprise by the enemy. It involves avoiding detection by the enemy or deceiving the enemy about friendly positions and intentions. Local security is an important part of maintaining the initiative. The requirement for maintaining local security is an inherent part

of all operations. Units use both active and passive measures to provide local security. Active measures include OPs, patrols and conducting stand-to. Passive measures include camouflage, noise and light discipline, and sensors to maintain surveillance over the area immediately around the unit.

5-38. The company team is responsible for maintaining its own security at all times. It does this by deploying mounted and dismounted OPs and patrols to maintain surveillance and by employing appropriate OPSEC measures. Besides maintaining security for its own elements, the company team may implement local security for other units as directed by the CAB commander. Examples of such situations include, but are not limited to, the following:

- Provide security for engineers as they emplace/clear obstacles or construct survivability positions in the company team BP.
- Secure an LZ.
- Establish mounted and dismounted OPs to maintain surveillance of enemy infiltration and reconnaissance routes.
- Conduct patrols to cover gaps in observation and to clear possible enemy OPs from surrounding areas.
- Secure human intelligence (HUMINT) teams.
- Secure NGOs delivering supplies.

SECTION II – RECONNAISSANCE

5-39. This section contains a discussion of reconnaissance operations including reconnaissance fundamentals, forms of reconnaissance, task organization, and planning considerations. (Refer to FM 3-90-2 for more information.)

RECONNAISSANCE OPERATIONS

5-40. *Reconnaissance* is a mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area (JP 2-0). Reconnaissance primarily relies on the human dynamic rather than technical means.

5-41. Reconnaissance identifies terrain characteristics, enemy and friendly obstacles to movement, and the disposition of enemy forces and civilian population so the commander can maneuver his forces freely and rapidly. Reconnaissance also answers the commander's critical information requirements (CCIR). *CCIR* is information that the commander identifies as critical to facilitating decision making. (Refer to ADRP 5-0 for more information.) Reconnaissance before unit movements and occupation of Aas is critical to protecting the force and preserving combat power. It keeps the force free from contact as long as possible so that it can concentrate on its decisive operation.

5-42. Reconnaissance can be passive or active. Passive reconnaissance includes such techniques as map and photographic reconnaissance and surveillance. Active methods available to the company team include mounted and dismounted ground reconnaissance and reconnaissance by fire. Active reconnaissance operations are classified as stealthy or aggressive.

RECONNAISSANCE FUNDAMENTALS

5-43. The seven fundamentals of successful reconnaissance operations are as follows:

- Ensure continuous reconnaissance.
- Do not keep reconnaissance assets in reserve.
- Orient on the reconnaissance objective.
- Report information rapidly and accurately.
- Retain freedom of maneuver.
- Gain and maintain enemy contact.
- Develop the situation rapidly.

5-44. Effective reconnaissance is continuous. The company team conducts reconnaissance before, during, and after all operations. Before an operation, reconnaissance focuses on filling gaps in information about the enemy and terrain. During an operation, reconnaissance focuses on providing the commander with updated information that verifies the enemy's composition, dispositions, and intentions as the battle progresses. After an operation, reconnaissance focuses on maintaining contact with the enemy to determine their next move and collecting information necessary for planning subsequent operations.

5-45. Reconnaissance assets are never kept in reserve. When committed, reconnaissance assets use all resources to accomplish the mission. This does not mean that all assets are committed all the time. The commander uses reconnaissance assets based on their capabilities and mission variables to achieve the maximum coverage needed to answer the commander's CCIR.

5-46. The commander uses the reconnaissance objective to focus his unit's reconnaissance efforts. The reconnaissance objective is a terrain feature, geographic area, or an enemy about which the commander wants to obtain additional information.

5-47. Reconnaissance assets must acquire and report accurate and timely information about the enemy, civil considerations, and the terrain over which operations are to be conducted. Information may quickly lose its value. Reconnaissance assets must report exactly what they see and, if appropriate, what they do not see.

5-48. Reconnaissance assets must retain battlefield mobility to successfully complete their missions. If these assets are decisively engaged, reconnaissance stops and a battle for survival begins. Reconnaissance assets must have clear engagement criteria that support the commander's intent. They must employ proper movement and reconnaissance techniques, use overwatching fires, and SOPs.

5-49. Once a unit conducting reconnaissance gains contact with the enemy, it maintains that contact unless the commander directing the reconnaissance orders otherwise or the survival of the unit is at risk. This does not mean that individual scout and reconnaissance teams cannot break contact with the enemy. The commander of the unit conducting reconnaissance is responsible for maintaining contact using all available resources.

5-50. When a reconnaissance asset encounters an enemy force or an obstacle, it must quickly determine the threat it faces. For an enemy force, it must determine the enemy's composition, dispositions, activities, and movements and assess the implications of that information. For an obstacle, it must determine the type and extent of the obstacle and whether it is covered by fire. Obstacles can provide the attacker with information concerning the location of enemy forces, weapon capabilities, and organization of fires. In most cases, the reconnaissance unit developing the situation uses actions on contact.

FORMS OF RECONNAISSANCE

5-51. The four forms of reconnaissance that apply to the company/team are—

- Route.
- Zone.
- Area.
- Reconnaissance in force.

ROUTE RECONNAISSANCE

5-52. Route reconnaissance focuses on a specific line of communication, such as a road, railway, or cross-country mobility corridor. A *route reconnaissance* is a directed effort to obtain detailed information on a specific route and on all terrain from which the enemy can influence movement along that route (ADRP 3-90). It is oriented on a specific area of movement, such as a road or trail, or on a more general area, like an axis of advance. A route reconnaissance is usually conducted when the commander wants to use the route in question.

5-53. Route reconnaissance tasks are the following:

- Find, report, and clear within capabilities enemy elements that can influence movement along the route.
- Determine the trafficability of the route; can it support friendly force?

- Reconnoiter all terrain that the enemy can use to dominate movement along the route, such as choke points, ambush sites, PZs, LZs, and drop zones.
- Reconnoiter all built-up areas, contaminated areas, and lateral routes along the route.
- Evaluate and classify all bridges, defiles, overpasses and underpasses, and culverts along the route.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) along the route.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above route information to the headquarters initiating the route reconnaissance mission, to include providing a sketch map or a route overlay.
- Answer CCIR.

ZONE RECONNAISSANCE

5-54. *Zone reconnaissance* is a directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries (ADRP 3-90). Teams usually conduct zone reconnaissance when the enemy situation is vague or when information concerning cross-country trafficability is required. Similar to route reconnaissance, mission variables and the commander's intent dictate the company team's actions during a zone reconnaissance.

5-55. Zone reconnaissance tasks are the following:

- Find and report all enemy forces within the zone.
- Clear all enemy forces, based on engagement criteria, in the designated AO within the capability of the unit conducting reconnaissance.
- Determine the trafficability of all terrain within the zone, including built-up areas.
- Locate and determine the extent of all contaminated areas in the zone.
- Evaluate and classify all bridges, defiles, overpasses, underpasses, and culverts in the zone.
- Locate any fords, crossing sites, or bypasses for existing and reinforcing obstacles (including built-up areas) in the zone.
- Locate all obstacles and create lanes as specified in execution orders.
- Report the above information to the commander directing the zone reconnaissance, to include providing a sketch map or overlay.
- Answer CCIR.

AREA RECONNAISSANCE

5-56. *Area reconnaissance* is a form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90). The area can be any location that is critical to the unit's operations. Examples include easily identifiable areas covering a large space (such as towns or military installations), terrain features (ridgelines, wood lines, choke points), or a single point (like a bridge or building). The tasks of an area reconnaissance are the same as those for a zone reconnaissance.

RECONNAISSANCE IN FORCE

5-57. *Reconnaissance in force* is a deliberate combat operation to discover or test the enemy's strength, dispositions, and reactions or to obtain other information (ADRP 3-90). Combined arms battalions or larger organizations usually conduct a reconnaissance in force mission. A company team will not conduct an reconnaissance in force independently, but may participate as part of a larger force.

TASK ORGANIZATION

5-58. Although not optimally organized for reconnaissance, the company can conduct route, zone, or area reconnaissance. The company may conduct a reconnaissance operation during preparation for another operation of its own (for example, performing zone reconnaissance before initiating a stationary guard operation); or it can conduct the reconnaissance to gain information for a higher headquarters. Usually, the company is task-organized with additional combat or sustainment assets as needed to meet the requirements of the reconnaissance operation.

PLANNING CONSIDERATIONS

5-59. Reconnaissance planning starts with the commander identifying the CCIR. This process may be conducted while the unit is planning or preparing for an operation; in many cases, it continues throughout the operation. (Refer to FM 3-20.96 for more information.) The company commander outlines the following:

- **Focus.** The commander continually assesses his original reconnaissance planning guidance. As the situation changes, the commander revises his guidance for reconnaissance when necessary to meet his higher commander's intent.
- **Reconnaissance objective.** This enables subordinates to prioritize tasking and narrow their scope of operations.
- **Tempo of reconnaissance.** This outlines the time requirements the commander envisions for the reconnaissance force and expresses them in order. It outlines the degree of completeness, the degree of covertness, and the risk the commander is willing to accept. The commander knows that he accepts increased risk to both the reconnaissance element and the main body when he accelerates the pace of reconnaissance. This risk can be somewhat offset by employing air reconnaissance and technical means to cover open terrain or areas of lower threat.
- **Engagement criteria.** This establishes the size or type of enemy forces the commander expects his reconnaissance force to engage, and at the expected level of force. This helps leaders plan direct and indirect fires, as well as establish bypass criteria.

5-60. The commander considers mission variables as he plans for mounted, dismounted, aerial, or combinations of reconnaissance. Conditions that lead to a decision about the type of reconnaissance include—

- Time constraints.
- Required detail level of reconnaissance.
- Availability of air units to perform coordinated reconnaissance with ground assets.
- IPB information.
- Avenues of approach that support friendly movement and exploit enemy weaknesses.
- Key positions, especially flanks that can be exploited.
- Information from OPs.
- Type of terrain.
- Environmental conditions, such as deep snow and muddy terrain that greatly hinder mounted reconnaissance.

5-61. The commander considers employing UAS for ground reconnaissance. Unmanned aircraft systems provide the commander with essential terrain and enemy information. Most UASs can operate in daylight or limited visibility and are difficult to detect or shoot down.

5-62. Leaders at all echelons coordinate and synchronize reconnaissance efforts. The key point is to use reconnaissance assets based on their capabilities and use their complementary capabilities to verify and expand on available information.

5-63. Sustainment planning is indispensable throughout the planning process. The commander assesses all constraints and considers the following:

- Resupply procedures for both mounted and dismounted reconnaissance missions.
- Predetermined locations and times for resupply.
- TTPs for casualty extraction and medical evacuation.
- Pickup points and times for pickup and aerial extraction of casualties.
- Resupply procedures for Class VIII by AHS support elements.

SECTION III – RELIEF IN PLACE

5-64. A *relief in place* is an operation in which, by the direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit (JP 3-07.3). The responsibilities of the

replaced elements for the mission and the assigned AO are transferred to the incoming unit. The incoming unit continues the operations as ordered. A commander conducts a relief in place as part of a larger operation, primarily to maintain the combat effectiveness of committed units. The higher headquarters directs when and where to conduct the relief and establishes the appropriate control measures. Normally, the unit relieved is defending. However, a relief may set the stage for resuming offensive operations. (Refer to FM 3-96 for more information.)

5-65. A relief may serve to free the relieved unit for other tasks (such as decontamination, reconstitution, routine rest, resupply, maintenance, or specialized training). Sometimes, as part of a larger operation, a commander wants the enemy force to discover the relief, because that discovery might cause it to do something in response that is prejudicial to its interest (such as move reserves from an area where the friendly commander wants to conduct a penetration).

5-66. The three techniques for conducting a relief are sequential, simultaneous, and staggered. These three relief techniques can occur regardless of the operational theme in which the unit is participating. Sequential or staggered reliefs can take place over a significant amount of time. The types of reliefs are defined as follows:

- **Sequential.** This occurs when each element within the relieved unit is relieved in succession, from right to left or left to right, depending on how it is deployed.
- **Simultaneous.** This occurs when all elements are relieved at the same time. Simultaneous relief takes the least time to execute, but is more easily detected by the enemy.
- **Staggered.** This occurs when the commander relieves each element in a sequence determined by the tactical situation, not its geographical orientation.

5-67. A relief can be characterized as either deliberate or hasty, depending on the amount of planning and preparations associated with the relief. The major differences are the depth and detail of planning and, potentially, the execution time. Detailed planning generally facilitates shorter execution time by determining exactly what the commander believes needs to be done and the resources needed to accomplish the mission. Deliberate planning allows the commander and staff to identify, develop, and coordinate solutions to most potential problems before they occur and to ensure the availability of resources when and where they are needed.

PLANNING

5-68. Once ordered to conduct a relief in place, the commander of the relieving unit contacts the commander of the unit to be relieved. The collocation of unit CPs helps achieve the level of coordination required. If the relieved unit's forward elements can defend the AO, the relieving unit executes the relief in place from the rear to the front. This facilitates movement and terrain management.

5-69. When planning for a relief in place, the company commander takes the following actions:

- Issues an order immediately.
- Sends an advance party of key leaders to conduct detailed reconnaissance and coordination.
- Ensures the relieving unit adopts the outgoing unit's normal pattern of activity as much as possible.
- Ensures the relieving unit determines when the company team assumes responsibility for the outgoing unit's position.
- Collocates team headquarters, as the relieving unit, with the relieved unit's headquarters.
- Maximizes operations security to prevent the enemy from detecting the relief operation.
- Plans for relief of sustainment elements after combat elements are relieved.
- Plans, as the unit being relieved, for transfer of excess ammunition, wire, petroleum, oils, and lubricants, and other material of tactical value to the incoming unit.
- Controls movement by reconnoitering, designating, and marking routes, and providing guides.

Note. Whenever possible, the commander conducts the relief at night or under other limited visibility conditions.

COORDINATION

5-70. Incoming and outgoing commanders meet to exchange tactical information, conduct a joint reconnaissance of the area, and complete other required coordination. The two commanders carefully address passage of command and jointly develop contingency actions to deal with enemy contact during the relief. This process usually includes coordination of the following information:

- Location of vehicle and individual positions (to include hide, alternate, and supplementary positions). Leaders should verify positions both by conventional map and on FBCB2 (if equipped).
- The enemy situation.
- The outgoing unit's tactical plan, including graphics, company team and platoon fire plans, and individual vehicles' sector sketches.
- Fire support coordination, including indirect fire plans and the time of relief for supporting artillery and mortar units.
- Types of weapons systems being replaced.
- Time, sequence, and method of relief.
- Location and disposition of obstacles, and the time when commanders will transfer responsibility.
- Supplies and equipment to be transferred.
- Movement control, route priority, and placement of guides.
- Command and signal information.
- Maintenance and logistical support for disabled vehicles.
- Visibility considerations.

Note. Units conduct relief on the radio nets of the outgoing unit.

CONDUCTING THE RELIEF

5-71. When conducting the relief, the outgoing commander retains responsibility for the AO and the mission. He exercises operational control over all subordinate elements of the incoming unit that have completed their portion of the relief. Responsibility passes to the incoming commander when all elements of the outgoing unit are relieved and adequate communications are established.

SEQUENTIAL RELIEF

5-72. Sequential relief is the most time-consuming relief method. The relieving unit moves to an AA to the rear of the unit to be relieved. Subordinate elements are relieved one at a time. This can occur in any order, with the relief following this general sequence:

- The outgoing and incoming units collocate their headquarters and trains elements to facilitate mission command and transfer of equipment, ammunition, fuel, water, and medical supplies.
- The first element being relieved (such as a platoon) moves to its alternate positions or BPs while the relieving element moves into the outgoing element's primary positions. The incoming element occupies vehicle and individual positions as appropriate.
- Incoming and outgoing elements complete the transfer of equipment and supplies.
- The relieved element moves to the designated AA behind its position.
- Once each outgoing element clears the rally point en route to its AA, the next relieving element moves forward.

SIMULTANEOUS RELIEF

5-73. Simultaneous relief is the fastest, but least secure, method. All outgoing elements are relieved at once, with the incoming unit usually occupying existing positions, including BPs, and vehicle and individual positions. The relief takes place in the following general sequence:

- Outgoing elements move to their alternate BPs and vehicle and individual positions.
- Incoming elements move along designated routes to the outgoing elements' primary positions.

- The units complete the transfer of equipment and supplies.
- Relieved elements move to the designated unit AA.

STAGGERED RELIEF

5-74. Staggered relief is the same as the sequential relief, but the sequence is determined by the tactical situation, not its geographical orientation.

SECTION IV – PASSAGE OF LINES

5-75. *Passage of lines* is an operation in which a force moves forward or rearward through another force's combat positions with the intent of moving into or out of contact with the enemy (JP 3-18). A passage may be designated as a forward or rearward passage of lines. (Refer to FM 3-90-2 for more information.)

5-76. Units usually conduct passage of lines anytime one unit cannot bypass another unit's position. A passage of lines is a complex operation requiring close supervision and detailed planning, coordination, and synchronization between the commanders of the unit conducting the passage and the unit being passed. The primary purpose of a passage of lines is to transfer responsibility (forward or rearward) for an area from one unit to another.

5-77. A passage of lines occurs under two basic conditions. A forward passage of lines occurs when a unit passes through another unit's positions while moving toward the FEBA. A rearward passage of lines occurs when a unit passes through another unit's positions while moving away from the FEBA.

PLANNING CONSIDERATIONS

5-78. The controlling CAB is responsible for planning and coordinating a passage of lines involving the company team. In some situations, such as the company team using multiple passage routes (such as, a separate route for each platoon), the company commander takes responsibility for planning and coordinating each phase of the operation.

5-79. When planning a passage of lines, the commander considers the following tactical factors and procedures:

- Passage lanes, use of deception.
- Battle handover.
- Obstacles.
- Air defense.
- Sustainment responsibilities.
- Mission command.
- Reconnaissance and coordination.
- Forward passage of lines.
- Rearward passage of lines.

FORWARD PASSAGE OF LINES

5-80. In a forward passage, the passing unit first moves to an AA or an attack position behind the stationary unit. Designated liaison personnel move forward to link up with guides and confirm coordination information with the stationary unit. Guides then lead the passing elements through the passage lane.

5-81. The company conducts a forward passage by employing tactical movement. It moves quickly, using appropriate dispersal and formations whenever possible, and keeping radio traffic to a minimum. It bypasses disabled vehicles as needed. The team holds its fire until it passes the BHL or the designated fire control measure, unless the commander has coordinated fire control with the stationary unit. Once clear of passage lane restrictions, the unit consolidates at a rally point or attack position, and then conducts tactical movement according to its orders. (See figure 5-1 on page 5-13, which shows a company forward passage of lines.)

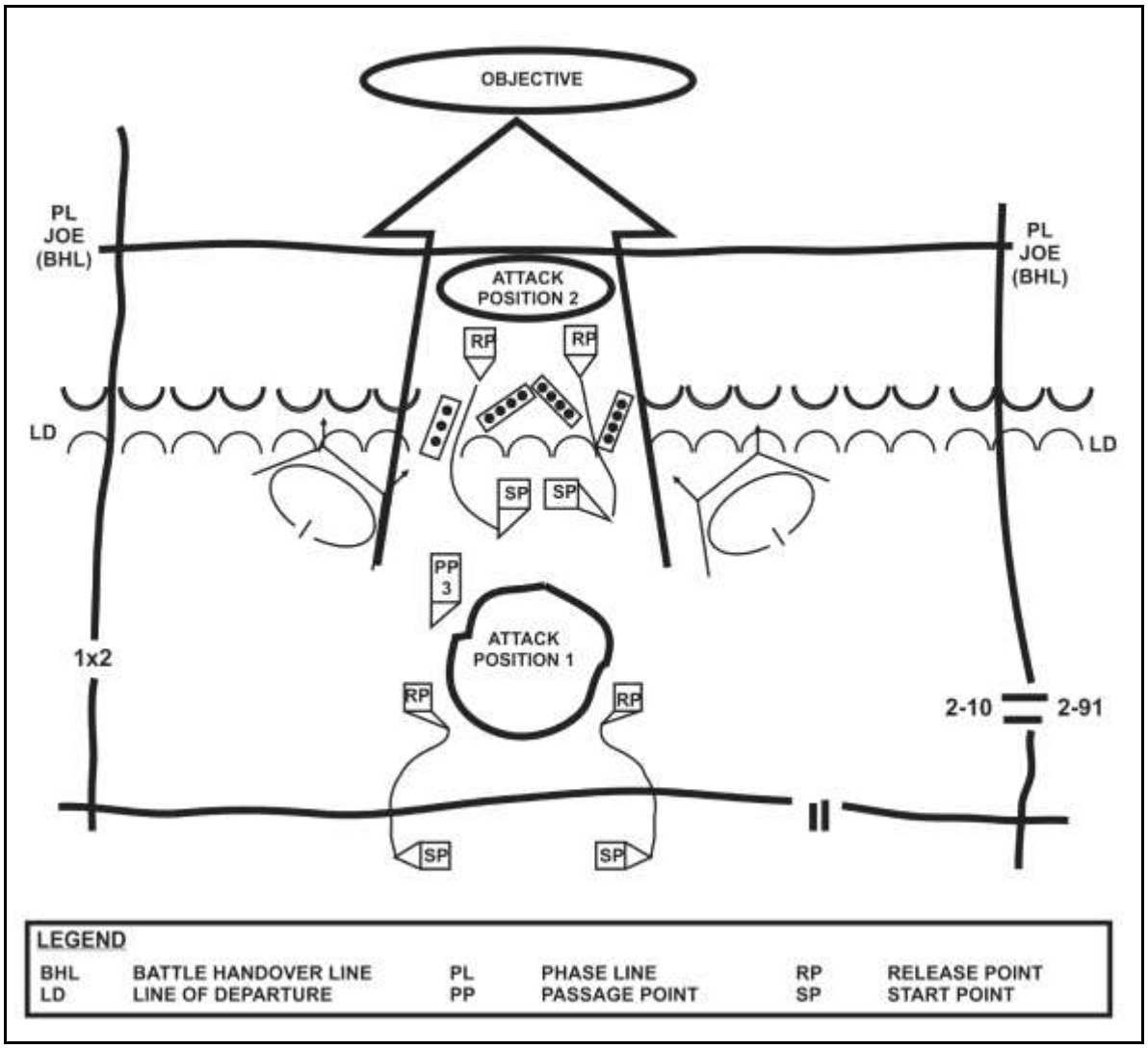


Figure 5 1. Company team forward passage of lines

REARWARD PASSAGE OF LINES

5-82. Because of the increased chance of fratricide during a rearward passage, coordination of recognition signals and direct fire restrictions is critical. The passing unit contacts the stationary unit while it is still beyond direct fire range and conducts coordination as discussed previously. Near recognition signals and location of the BHL are emphasized. Both the passing unit and the stationary unit can employ additional fire control measures, such as restrictive fire lines (RFL), to minimize the risk of fratricide. (See figure 5-2.)

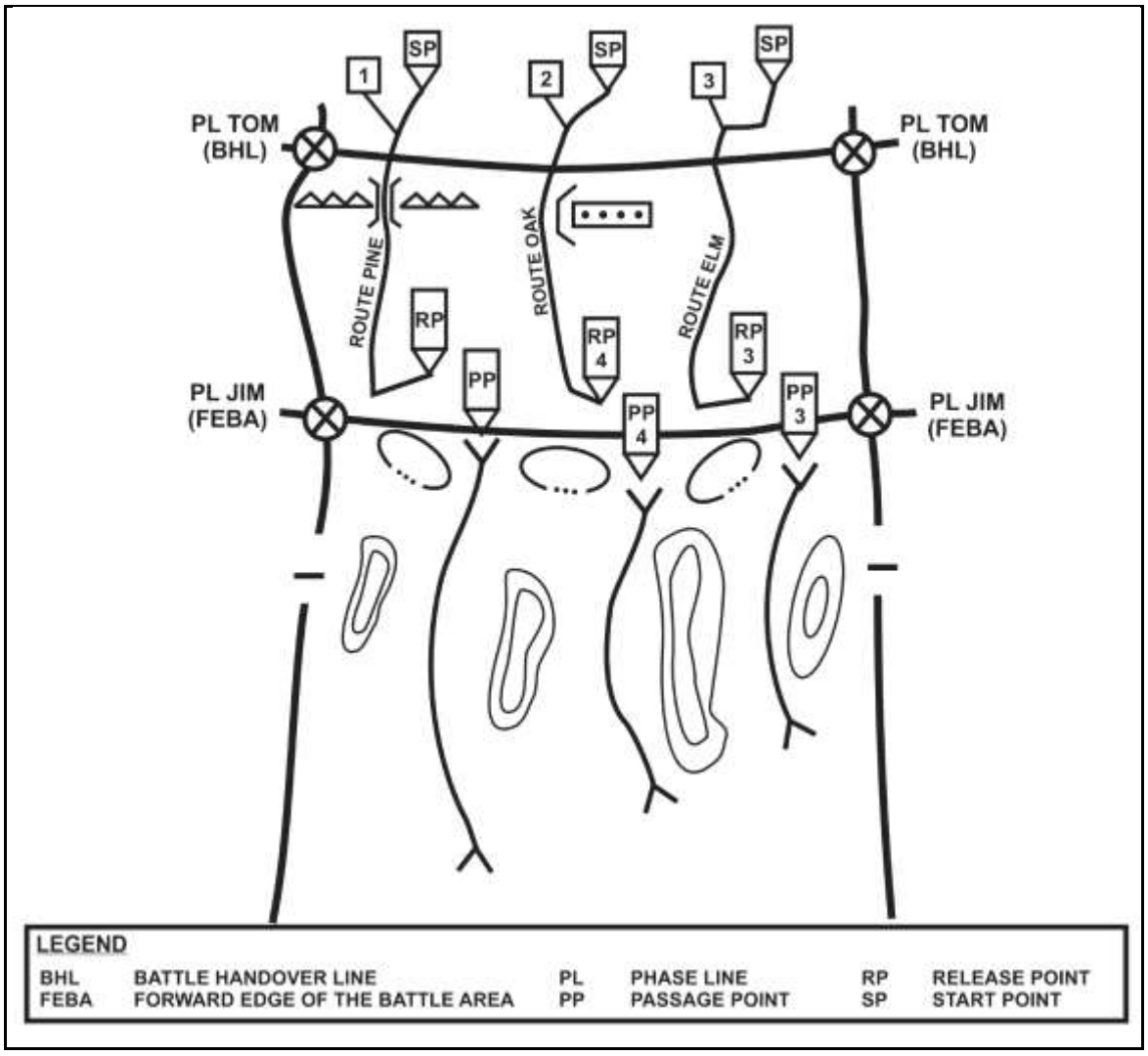


Figure 5-2. Company team rearward passage of lines

5-83. Following coordination, the passing unit continues tactical movement toward the passage lane. Gun tubes are oriented on the enemy, and the passing unit is responsible for its security until it passes the BHL. If the stationary unit provides guides, the passing unit can conduct a short halt to link up and coordinate with them. The passing unit moves quickly through the passage lane to a designated location behind the stationary unit. (See table 5-1 on page 5-15.)

Table 5-1. Stationary and passing unit responsibilities

Stationary Unit	*Passing Unit*
Clears lanes or reduces obstacles along routes.	May assist with reducing obstacles.
Provides obstacle and friendly units' locations.	Provides order of movement and scheme of maneuver.
Clears and maintains routes up to the battle handover line (BHL).	May assist with maintaining routes.
Provides traffic control for use of routes and lanes.	Augments the traffic control capability of the stationary unit as required.
Provides security for the passage up to the BHL.	Maintains protection measures.
Identifies locations for the passing unit to use as assembly areas (Aas) and attack positions.	Reconnoiters from its current location to its designated Aas and attack positions.
Provides the passing unit any previously coordinated or emergency logistics assistance within its capability.	Assumes full responsibility for its own sustainment support forward of the BHL.
Controls all fires in support of the passage.	Positions artillery to support the passage.

SECTION V – PATROLS

5-84. A patrol is a detachment sent out by a larger unit to conduct a combat, reconnaissance, or security mission. A patrol's organization is temporary and specifically matched to the immediate task. Because a patrol is an organization and not a mission, it is not correct to speak of giving a unit a mission to "patrol."

5-85. A patrol can consist of a unit as small as a fire team. Squad and platoon-size patrols are normal. Sometimes, for larger combat tasks, normally for a raid, the patrol can be a company. (Refer to FM 3-21.8 for more information.)

TYPES OF PATROLS

5-86. The planned action determines the type of patrol. The two main types of patrols are combat and reconnaissance. Regardless of the type of patrol, the unit needs a clear task and purpose. The leader of any patrol, regardless of the type or the tactical task assigned, has an inherent responsibility to prepare and plan for possible enemy contact while on the mission. Patrols are never administrative as they are always assigned a tactical mission.

COMBAT PATROL

5-87. A combat patrol provides security and harasses, destroys, or captures enemy troops, equipment, or installations. When the commander gives a unit the mission to send out a combat patrol, he intends for the patrol to make contact with the enemy and engage in close combat. A combat patrol always tries to escape detection while moving, but discloses its location to the enemy in a sudden, violent attack. For this reason, the patrol normally carries a significant amount of weapons and ammunition. It may carry specialized munitions.

5-88. A combat patrol collects and reports any information gathered during the mission, whether related to the combat task or not. The three types of combat patrols are—

- Raid.
- Ambush.
- Security.

RECONNAISSANCE PATROL

5-89. A reconnaissance patrol collects information or confirms or disproves the accuracy of information previously gained. The intent for this patrol is to avoid enemy contact and accomplish its tactical task without engaging in close combat. With one exception (presence patrols), reconnaissance patrols always try to accomplish their mission without being detected or observed. Because detection cannot always be avoided, a reconnaissance patrol carries the necessary arms and equipment to protect itself and break contact with the enemy. A reconnaissance patrol travels light, that is, with as few personnel and as little arms, ammunition, and equipment as possible. This increases stealth and cross-country mobility in close terrain. Regardless of how the patrol is armed and equipped, the leader always plans for the worst case, contact.

PLANNING CONSIDERATIONS FOR MOUNTED PATROLS

5-90. To help maintain Soldier strength and energy, units often use vehicle transportation to move up to or closer to the actual targeted patrol area. Usually this is where the vehicles can no longer effectively travel or that best accommodates the intended mission. At that point, the unit dismounts and continues on with the mission. Dismounted Infantry units may be augmented with military vehicles, allowing them to conduct mounted patrolling. They may procure other types of vehicles.

5-91. Mounted urban patrolling principles include the following actions:

- Ensure mutual support and depth by maintaining constant observation among vehicles.
- Coordinate a supporting fire plan with any dismounted units in the area.
- Use a form of overwatch whenever possible to maintain 360-degree security.
- Develop a reliable communications plan for mounted and dismounted elements.
- Develop vehicle recovery and CASEVAC plans.
- Adjust patrol routes and speed to promote deception and avoid repetitive patterns.
- Maintain SA.
- Adjust formations and vehicle separation distance based on METT-TC to maintain mutual visibility.
- Length of patrol.

5-92. Mounted patrols never enter an area via the route they will use to exit it. Vehicles should travel at moderate speeds, with the lead vehicle stopping only to investigate those areas that pose a potential threat or support the essential tasks of the patrol. A vehicle speed of 15 to 20 mph to allows for adequate observation and quick reaction. Slower speeds may allow noncombatants or the enemy to impede movement. On the other hand, vehicles should move at high speeds only when responding to an incident or contact. Equipment and weapons stored externally should be secured high enough on the vehicle to prevent locals from snatching these items.

5-93. When vehicles must stop, designated personnel dismount to provide security. The vehicle gunner is at the ready, and the driver remains in his seat at the ready. Units must maintain SA during patrols; this includes orientation on other patrols in the urban area. If an element takes fire, it should be capable of communicating with other patrols to obtain assistance and support.

PLANNING CONSIDERATIONS FOR DISMOUNTED PATROLS

5-94. Dismounted patrolling often begins with movement by some means of transportation to or near the area to be patrolled. If vehicles are used to transport personnel to a dismount location, leaders have two options when considering what to do with the vehicles after drop off. The first option is to send the vehicles to another more secure staging area or back to the area they departed from (such as a combat outpost or other base, until needed for pick-up of personnel). The second option is to leave the vehicles in or near the drop off location. The decision on what to do with the vehicles relies on many factors with some of the main considerations being—

- Length of the patrol.
- Use of available covering artillery or mortar fires.

- Security of the vehicles and personnel remaining with the vehicles.
- CASEVAC/medical evacuation procedures.

5-95. Leaders should determine what their Soldiers carry with them on a dismounted patrol. Leaders should ensure Soldiers only carry what is necessary for the duration of the mission. Body armor, weapons, and ammunition all weigh the Soldier down. Assault packs often consist of little more than water, food, additional ammunition, a lightweight blanket, survival gear, and some medical supplies. If resupply is needed for the patrol it will often come by way of air since travel back to a resupply pick up location is often exhausting and time consuming.

SECTION VI – LINKUP

5-96. A *linkup* is a meeting of friendly ground forces, which occurs in a variety of circumstances (ADRP 3-90). It happens when an advancing force reaches an objective area previously seized by an airborne or air assault; when an encircled element breaks out to rejoin friendly forces or a force comes to the relief of an encircled force; and when converging maneuver forces meet. Both forces may be moving toward each other, or one may be stationary. Whenever possible, joining forces exchange as much information as possible before starting an operation.

5-97. The headquarters ordering the linkup establishes the following:

- Common operational picture.
- Command relationship and responsibilities of each force before, during, and after linkup.
- Coordination of fire support before, during, and after linkup, including control measures.
- Linkup method.
- Recognition signals and communication procedures to use, including pyrotechnics, armbands, vehicle markings, gun-tube orientation, panels, colored smoke, lights, and challenge and passwords.
- Operations to conduct following linkup.

TWO LINKUP METHODS

5-98. There are two linkup methods. The preferred method is when the moving force has an assigned limit of advance near the other force and conducts the linkup at predetermined contact points. Units then coordinate further operations.

5-99. The least preferred method of linkup a commander can use during highly mobile or fluid operations is when the enemy force escapes from a potential encirclement or when one of the linkup forces is at risk and requires immediate reinforcement. In this method, the moving force continues to move and conduct long-range recognition via radio or other measures, stopping only when it makes physical contact with the other force.

PHASES OF LINKUP

5-100. The company team conducts linkup activities independently or as part of a larger force. Within a larger unit, the team may lead the linkup force. The linkup consists of three phases. The following actions are critical to the execution of a successful link-up operation.

PHASE 1—FAR RECOGNITION SIGNAL

5-101. During this phase, the forces conducting a linkup establish both frequency modulation radio and digital communications before reaching direct fire range. The lead element of each linkup force should monitor the radio frequency of the other friendly force.

PHASE 2—COORDINATION

5-102. Before initiating movement to the linkup point, the forces must coordinate necessary tactical information that includes the following:

- Known enemy situation.

- FBCB2 (if equipped) filter setting and address book commonality.
- Type and number of friendly vehicles and number of vehicles equipped with FBCB2.
- Disposition of stationary forces (if either unit is stationary).
- Routes to the linkup point and rally point (if any).
- Fire control measures.
- Near recognition signal(s).
- Communications information.
- Sustainment responsibilities and procedures.
- Finalized location of the linkup point and rally point(s) (if any).
- Any special coordination, such as those covering maneuver instructions or requests for medical support.

PHASE 3—MOVEMENT TO LINKUP POINT AND LINKUP

5-103. All units or elements involved in the linkup enforce strict fire control measures to help prevent fratricide. Moving and converging forces must easily recognize linkup points and RFLs. Linkup elements take the following actions:

- Conduct far recognition using frequency modulation radio or FBCB2 (if equipped).
- Conduct short-range (near) recognition using the designated signal.
- Complete movement to the linkup point.
- Establish local security at the linkup point.
- Conduct additional coordination and linkup activities as needed.

SECTION VII – ASSEMBLY AREAS

5-104. An *assembly area* is an area a unit occupies to prepare for an operation (FM 3-90-1). Ideally, an AA provides the following:

- Concealment from air and ground observation.
- Adequate entrances, exits, and internal routes.
- Space for dispersion; each AA is separated by enough distance from other Aas to preclude mutual interference.
- Cover from direct fire.
- Good drainage and soil conditions that can sustain unit vehicles and individual Soldier movements.
- Terrain masking of electromagnetic signatures.
- Terrain allowing observation of ground and air avenues into the AA.
- Sanctuary from enemy medium-range artillery fires because it is located outside the enemy's range.

5-105. The proper location of Aas contributes significantly to both security and flexibility. It should facilitate future operations so movement to subsequent positions can take place smoothly and quickly by concealed routes. The tactical mobility of the company allows it to occupy Aas at greater distances from the LD.

QUARTERING PARTY OPERATIONS

5-106. A *quartering party* is a group of unit representatives dispatched to a probable new site of operations in advance of the main body to secure, reconnoiter, and organize an area before the main body's arrival and occupation (FM 3-90-2). Quartering parties have four responsibilities: conducting reconnaissance (if reconnaissance parties are not used), securing the area, organizing the area, and guiding arriving units.

5-107. During tactical unit movement, the reconnaissance party can perform area reconnaissance as a follow-on mission. An area reconnaissance is performed to determine suitability of the area. The quartering party provides initial security of the area until the main body arrives. Aerial reconnaissance (such as, UAS)

can help the quartering party secure the assembly area by conducting screening missions and surveillance of possible threat avenues of approach.

5-108. The company team establishes the quartering party according to their SOPs. For example, the quartering party could consist of one vehicle per platoon and a vehicle from the headquarters section. The company XO, 1SG, or senior NCO usually leads the quartering party. The quartering party's actions at the AA include the following:

- Reconnoiter for enemy forces and CBRN contamination.
- Evaluate the condition of the route leading into the AA and the suitability of the area (drainage, space, internal routes).
- Organize the area based on the commander's guidance; designate and mark tentative locations for platoons' vehicles, CP vehicles, and trains.
- Improve and mark entrances, exits, and internal routes.
- Mark bypasses or removes obstacles (within the party's capabilities).
- Develop digital AA overlay and send overlays to company team main body.

OCCUPATION OF ASSEMBLY AREA

5-109. Once the quartering party finishes preparing the AA, it awaits the arrival of the company team main body, maintaining surveillance and providing security of the area within its capabilities. The *main body* is the principal part of a tactical command or formation (ADRP 3-90). It does not include detached elements of the command, such as advance guards, flank guards, and covering forces. SOPs and guides assist vehicle commanders to quickly find their positions, clear the route, and assume designated positions in the AA.

5-110. The company team may occupy the AA as an independent element or as part of the CAB. In either situation, the company team occupies its positions upon arrival using the procedures for hasty occupation of a BP. The commander establishes local security and coordinates with adjacent units. He assigns weapons orientation and a sector of responsibility for each platoon and subordinate element. If the company team occupies the AA alone, it establishes a perimeter defense. (See figure 5-3.)

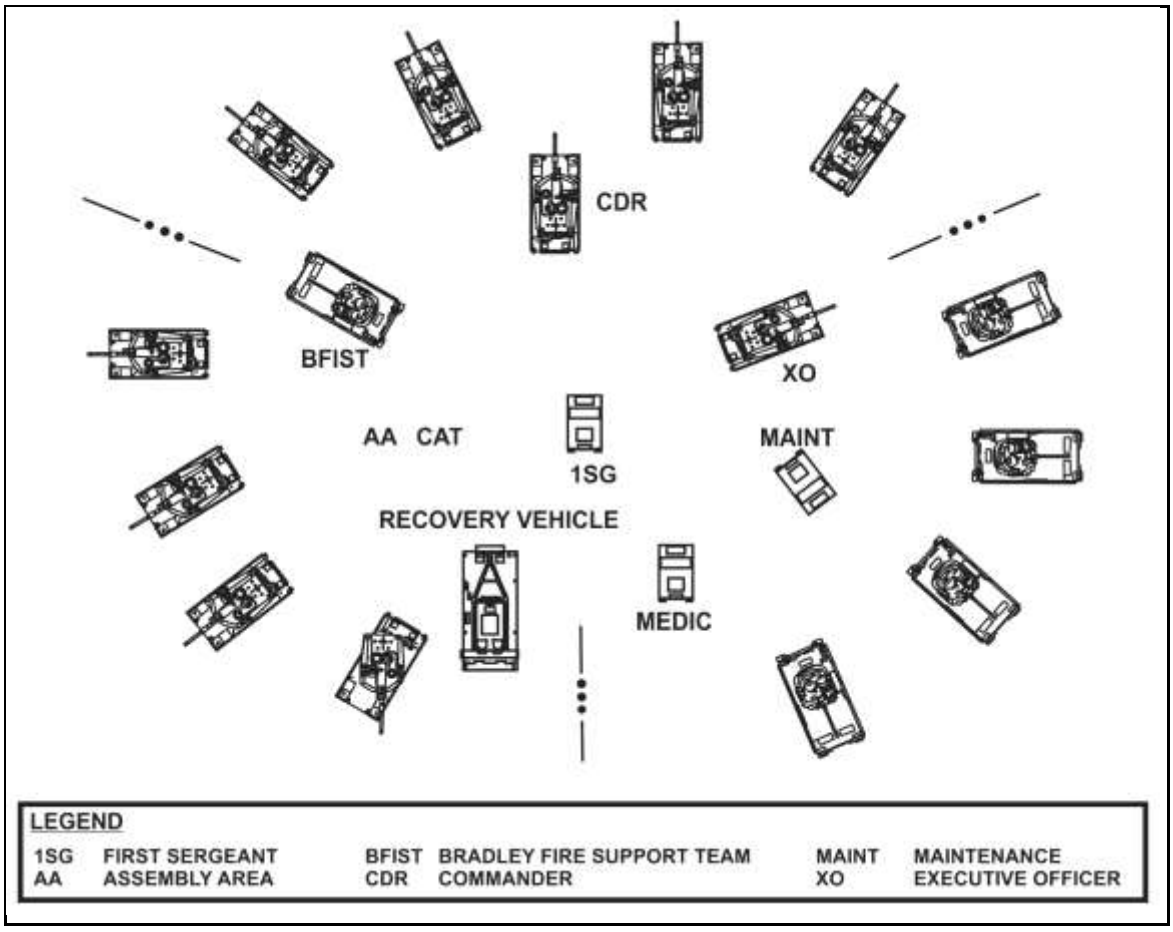


Figure 5-3. Company team AA example

ACTIONS IN ASSEMBLY AREA

5-111. An AA is not designated as a defensive position, but the company organizes it so that a threat ground attack could be detected and defeated. Security against air attack is best provided by passive measures designed to conceal the unit from detection. Additional security considerations include the following:

- Guards at all entrances and exits control the flow of traffic.
- OPs cover key terrain features and likely avenues of approach.
- Platoons prepare fire plans and coordinate on the flanks.
- Fire support plans are prepared by the FIST and commander.
- Patrols, sensors, and surveillance devices augment security.
- Contact points for units assist in coordination.
- Roads are the specific responsibility of subordinate units.
- Movement is confined to roads to preclude needless surface disruption that could leave a visible aerial indicator.
- Unnecessary vehicle movement is restricted.
- Minimal use of radios reduces electronic signature.
- Noise and light discipline is strictly enforced.
- Readiness condition (REDCON) level is established and adjusted based on METT-TC.
- Units must consider the location and activities of other units within the AO and coordinate with those assets for mutual security.

5-112. Following occupation of the AA, the company team prepares for future operations by conducting TLP and priorities of work according to the CAB and company team OPORDs. These preparations include the following:

- Establish and maintain security (at the appropriate readiness level).
- Develop a defensive fire plan and forward it to the CAB's main CP via FBCB2 if equipped.
- Employ mechanized Infantry squads to conduct dismounted security patrols to clear dead space and restrictive terrain.
- Conduct TLP.
- Conduct precombat checks and precombat inspections based on time available.
- Perform maintenance on vehicles and communications equipment.
- Verify weapons system status, conduct boresighting, prepare-to-fire checks, test-firing, and other necessary preparations.
- Conduct resupply, refueling, and rearming operations.
- Conduct rehearsals and other training for upcoming operations.
- Conduct personal care and hygiene activities.
- Adjust task organization as necessary.
- Account for company team personnel and sensitive items.
- Reestablish vehicle load plans, as needed.

Note. The company usually coordinates test-firing with its higher headquarters.

DEPARTURE

5-113. Departing the assembly area is the first step of a mission. A progressive system of increasing readiness ensures that units are ready to move when required without needlessly tiring Soldiers and wasting fuel during long waits. The AA is occupied with the follow-on mission in mind to preclude congestion on departure. Routes from subordinate unit locations are reconnoitered and timed. Subordinate units designate a linkup point, and units move to and through that point based on their reconnaissance. Depending on threat capabilities, departure may be conducted under radio listening silence.

LAAGER FORMATION

5-114. The Laager formation affords the company team some advantages in an open terrain, rolling hills or grassland. (See figure 5-4.) The following considerations apply when using the Laager formation:

- Optics and weapons stand-off are maximized and the need for dismounted OPs is minimized.
- In the event the company team receives indirect fire, displacement to an alternate location is efficient because all vehicles are oriented in the same direction and platoon formations are contiguous.
- Light skinned vehicles are protected inside the formation.

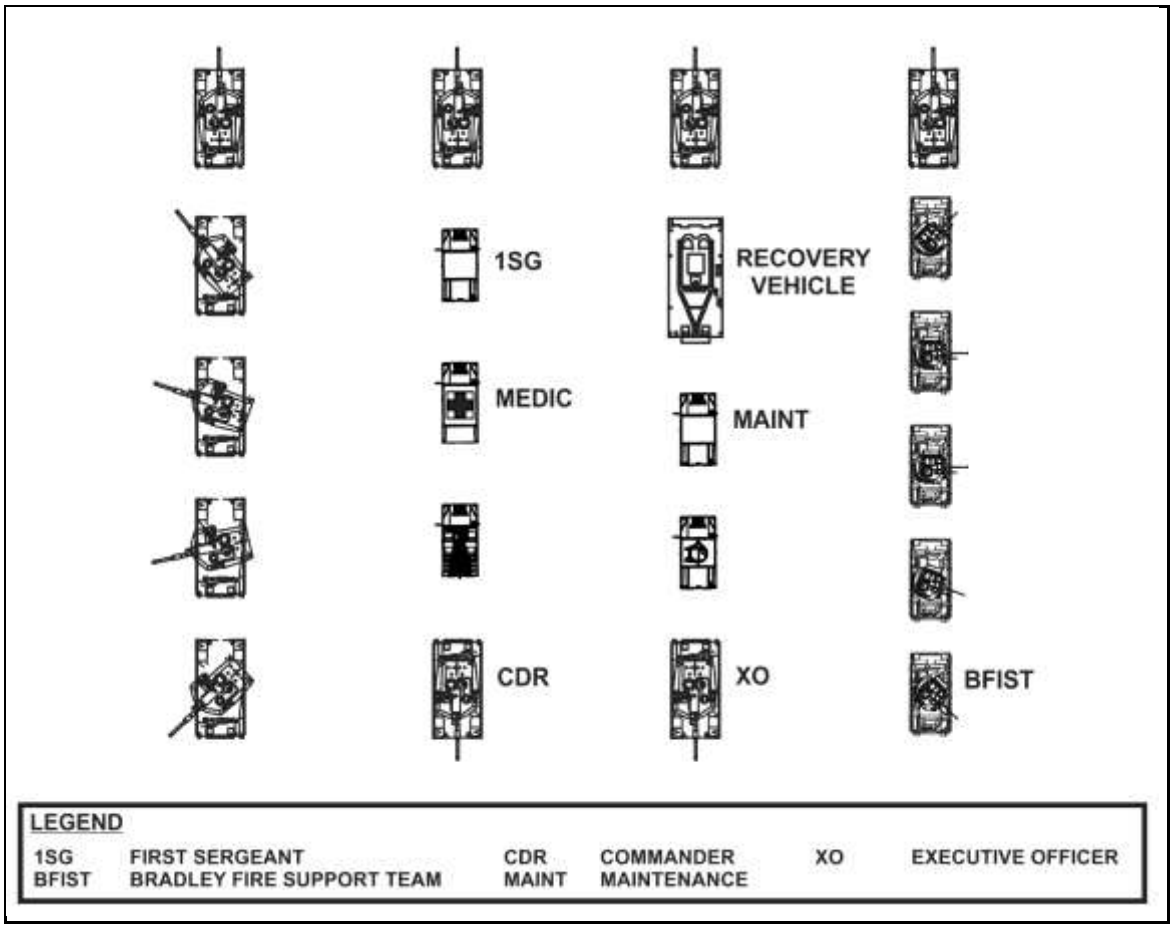


Figure 5-4. Example Laager formation

TROOP MOVEMENT

5-115. *Troop movement* is the movement of troops from one place to another is accomplished by any available means (ADRP 3-90). The ability of a commander to posture his force for a decisive or shaping operation depends on his ability to move that force. The essence of battlefield agility is the capability to conduct rapid and orderly movement to concentrate the effects of combat power at decisive points and times. Successful movement places troops and equipment at their destination at the proper time, ready for combat. The three types of troop movement are administrative movement, tactical road march, and approach march.

ADMINISTRATIVE MOVEMENT

5-116. In an administrative movement troops and vehicles are arranged to expedite their movement and conserve time and energy when no enemy interference, except by air, is anticipated. The commander conducts administrative movements only in secure areas.

TACTICAL ROAD MARCHES

5-117. A *tactical road march* is a rapid movement used to relocate units within an AO to prepare for combat operations (ADRP 3-90). Security against enemy air attack is maintained and the unit is prepared to take immediate action against an enemy ambush, although contact with enemy ground forces is not expected.

5-118. The primary consideration of the tactical road march is rapid movement. However, the moving force employs security measures, even when contact with enemy ground forces is not expected. Units conducting

road marches may or may not be organized into a combined arms formation. During a tactical road march, the commander is always prepared to take immediate action if the enemy attacks.

5-119. The organization for a tactical road march is the march column. A *march column* consists of all elements using the same route for a single movement under control of a single commander (FM 3-90-2). The commander organizes a march column into four elements: reconnaissance, quartering party, main body, and trail party.

5-120. Units conducting tactical road marches employ three tactical march techniques: open column, close column, and infiltration. Each of these techniques uses scheduled halts to control and sustain the road march. Mission variables require adjustments in the standard distances between vehicles and Soldiers. During movement, elements within a column of any length may encounter many different types of routes and obstacles simultaneously. Consequently, parts of the column may be moving at different speeds, which can produce an undesirable accordion-like effect. The movement order establishes the order of march, rate of march, interval or time gaps between units, column gap, and maximum catch-up speed. Unless the commander directs them not to do so for security reasons, march units report when they have crossed each control point.

APPROACH MARCH

5-121. An *approach march* is the advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90). However, it emphasizes speed over tactical deployment. Both heavy and light forces conduct tactical road marches and approach marches.

5-122. The commander employs an approach march when the enemy's approximate location is known, since it allows the force to move with greater speed and less physical security or dispersion. Units conducting an approach march are task-organized before the march begins to allow them to transition to an on-order or a be-prepared mission without making major adjustments in organization.

5-123. The approach march terminates in a march objective, such as an attack position, AA, or assault position, or can be used to transition to an attack. Follow-and-assume and reserve forces may conduct an approach march forward of a LD.

SECTION VIII – BREACHING OPERATIONS

5-124. Breaching is a synchronized combined arms operation under the control of a maneuver commander. Whenever possible, units should bypass obstacles, enabling them to maintain the momentum of the operation. Commanders must ensure that conducting the bypass provides a tactical advantage without exposing the unit to unnecessary danger. Breaching operations begin when friendly forces detect an obstacle. Breaching operations end when friendly forces destroy the enemy on the far side of the obstacle, or when battle handover has occurred between a unit conducting the breaching operation and follow-on forces. Successful obstacle breaching depends on the CAB effectively applying the breaching fundamentals of suppress, obscure, secure, reduce, and assault. Deliberate, hasty (includes in stride), and covert are the three general types of breaching operations. (Refer to Army Tactics, Techniques, and Procedures 3-90.4 for more information.)

BREACHING TENETS

5-125. Successful breaching operations are characterized by applying breaching tenets. These tenets should be applied whenever an obstacle is encountered in the AO, whether during an attack or a route clearance operation. The tenets are—

- Intelligence.
- Breaching fundamentals.
- Breaching organization.
- Mass.
- Synchronization.

INTELLIGENCE

5-126. Success depends largely on the force commander's ability to see the AO. He must identify how the enemy is using the terrain to minimize the risk of surprise. This is particularly true when attempting to counter the enemy's use of obstacles. This is done with the IPB process. During the IPB process, the SITTEMP is developed. The SITTEMP is a graphic depiction of expected threat dispositions based on threat doctrine and the effects of the AO for a particular COA.

BREACHING FUNDAMENTALS

5-127. Suppress, obscure, secure, reduce, and assault are the breaching fundamentals that must be applied to ensure success when breaching against a defending enemy. These fundamentals will always apply, but they may vary based on the mission variables.

SUPPRESS

5-128. Suppression is a tactical task used to employ direct or indirect fires or an electronic attack on enemy personnel, weapons, or equipment to prevent or degrade enemy fires and observation of friendly forces. The purpose of suppression during breaching operations is to protect forces reducing and maneuvering through an obstacle.

5-129. Effective suppression is a mission-critical task performed during any breaching operation. Suppressive fires in sufficient volume serve to secure the reduction area. Successful suppression generally triggers the rest of the actions at the obstacle. Fire control measures ensure that all fires are synchronized with other actions at the obstacle. Although suppressing the enemy overwatching the obstacle is the mission of the support force, the breach force should be able to provide additional suppression against an enemy that the support force cannot effectively suppress.

OBSCURE

5-130. Obscuration must be employed to protect forces conducting obstacle reduction and the passage of assault forces. Obscuration hampers enemy observation and target acquisition and conceals friendly activities and movement. Obscuration smoke deployed on or near the enemy's position minimizes its vision. Screening smoke employed between the reduction area and the enemy conceals movement and reduction activities. It also degrades enemy ground and aerial observations. Obscuration must be carefully planned to provide maximum degradation of enemy observation and fires, but it must not significantly degrade friendly fires and control.

SECURE

5-131. Friendly forces secure the reduction area to prevent the enemy from interfering with obstacle reduction and the passage of the assault force through the lanes created during the reduction. Security must be effective against outposts and fighting positions near the obstacle and against overwatching units, as necessary. The far side of the obstacle must be secured by fires or be occupied before attempting any effort to reduce the obstacle. The attacking unit's higher HQ has the responsibility to isolate the breach area by fixing adjacent units, attacking enemy reserves in depth, and providing counterfire support.

5-132. Identifying the extent of the enemy's defenses is critical before selecting the appropriate technique to secure the point of breach. If the enemy controls the point of breach and cannot be adequately suppressed, the force must secure the point of breach before it can reduce the obstacle.

5-133. The breach force must be resourced with enough maneuver assets to provide local security against the forces that the support force cannot sufficiently engage. Elements within the breach force that secure the reduction area may also be used to suppress the enemy once reduction is complete.

REDUCE

5-134. Reduction is the creation of lanes through or over an obstacle to allow an attacking force to pass. The number and width of lanes created varies with the enemy situation, the assault force's size and composition, and the scheme of maneuver. The lanes must allow the assault force to rapidly pass through the obstacle. The breach force will reduce, proof (if required), mark, and report lane locations and the lane-

marking method to higher HQ. Follow-on units will further reduce or clear the obstacle when required. Reduction cannot be accomplished until effective suppression and obscuration are in place, the obstacle has been identified, and the point of breach is secure.

ASSAULT

5-135. A breaching operation is not complete until—

- Friendly forces have assaulted to destroy the enemy on the far side of the obstacle that is capable of placing or observing direct and indirect fires on the reduction area.
- Battle handover with follow-on forces has occurred, unless no battle handover is planned.

BREACHING ORGANIZATION

5-136. A commander organizes friendly forces to accomplish the breaching fundamentals quickly and effectively. This requires him to organize support, breach, and assault forces with the necessary assets to accomplish their roles. The support force's primary responsibility is to eliminate the enemy's ability to interfere with a breach operation. The breach force assist in the passage of the assault force by creating, proofing (if necessary), and marking lanes. The assault force's primary mission is to destroy the enemy and seize terrain on the far side of the obstacle to prevent the enemy from placing direct fires on the created lanes. (See table 5-2.)

Table 5-2. Relationship between breaching organization and breaching fundamentals

Breaching Organization	*Breaching Fundamentals*	*Responsibilities*
Support force	Suppress Obscure	Suppress enemy direct-fire systems covering the reduction area. Control obscuring smoke. Prevent enemy forces from repositioning or counterattacking to place direct fires on the breach force.
Breach force	Suppress (provides additional suppression) Obscure (provides additional obscuration in the reduction area) Secure (provides local security) Reduce	Create and mark the necessary lanes in an obstacle. Secure the nearside and far side of an obstacle. Defeat forces that can place immediate direct fires on the reduction area. Report the lane status/location.
Assault force	Assault Suppress (if necessary)	Destroy the enemy on the far side of an obstacle that is capable of placing direct fires on the reduction area. Assist the support force with suppression if the enemy is not effectively suppressed. Be prepared to breach follow-on and protective obstacles after passing through the reduction area.

MASS

5-137. Breaching is conducted by rapidly applying concentrated efforts at a point to reduce obstacles and penetrate the defense. Massed combat power is directed against the enemy's weakness. The location selected for breaching depends largely on the weakness in the enemy's defense, where its covering fires are minimized. If friendly forces cannot find a natural weakness, they create one by fixing the majority of the enemy force and isolated a small portion of it for attack.

SYNCHRONIZATION

5-138. Breaching operations require precise synchronization of the breaching fundamentals by the support, breach, and assault forces. Failure to synchronize effective suppression and obscuration with obstacle reduction and assault can result in rapid and devastating losses of friendly troops in the obstacles or the enemy's EA.

5-139. The company team best achieves synchronization in a breaching operation best by using detailed reverse planning, clear instructions to subordinate elements, effective mission command, and extensive rehearsals. The emphasis is on the steps of suppress, obscure, secure, reduce, and assault. Planning considerations for synchronization during breaching, listed in reverse order, include the following:

- Reverse planning starts with actions on the objective.
- The planned actions on the objective influence the size and composition of the assault force, and the number and location of lanes the team must create.
- Lane requirements, topography, and the type of obstacles determine the type and number of reduction assets task organized to the breach force.
- The ability of the enemy's Infantry to interfere with the breach determines whether friendly forces will secure the breach site by fires or by force.
- The enemy's ability to mass fires at the breach site dictates the nature of the required suppression fires (including the composition of the support force, and the type and amount of supporting fires).
- The location of the enemy and the availability of clear fields of fire determine the location of the support force and its support by fire position.

CONDUCTING THE BREACH

5-140. Breaching operations entail the coordinated efforts of three task-organized elements: the support force, the breach force, and the assault force. The discussion in this section covers the actions and responsibilities of these elements.

BREACHING ORGANIZATION

5-141. The commander in charge of the breaching operation designates support, breach, and assault forces.

SUPPORT FORCE

5-142. This element usually leads movement of the breach elements. After identifying the obstacle, it moves to covered and concealed areas and establishes support-by-fire positions. The support force leader sends a voice or digital spot report (SPOTREP) to the commander. This report must describe the location and complexity of the obstacle, the composition of enemy forces that are overwatching the obstacle, and the location of possible bypasses. The commander decides whether to maneuver to a bypass or to breach the obstacle.

Note. The commander must keep in mind that a bypass may lead to an enemy kill zone.

5-143. In either case, the support force suppresses any enemy elements that are overwatching the obstacle to allow the breach force to breach or bypass the obstacle. The support force should be in position to request suppressive artillery fires and smoke for obscuration. As the breach and assault forces execute their missions, the support force lifts or shifts supporting fires. Because the enemy is likely to engage the support force with artillery, the support force must be prepared to move to alternate positions while maintaining suppressive fires.

BREACH FORCE

5-144. The breach force receives a voice or digital SPOTREP identifying the location of the obstacle or bypass. It then must organize internally to fulfill these responsibilities:

- Provide local security for the breach site as needed.
- Conduct the actual breach. The breach force creates, proofs, and marks a lane through the obstacle or secures the bypass.
- Move through the lane to provide local security for the assault force on the far side of the obstacle. In some instances, the breach force may move to hull-down positions that allow it to suppress enemy elements overwatching the obstacle. At other times, it may assault the enemy, with suppressive fires provided by the support force.

ASSAULT FORCE

5-145. The primary mission of the assault force is to attack through the created lanes in the obstacle and seize the far side objective to allow safe passage of follow-on forces through the breach area. The assault force is prepared to assist the support force with suppression while the breach force reduces the obstacle. The assault force must have sufficient combat power to seize the far side objective.

Breach in Support of an Attack

5-146. The following example provides information that a company team commander should consider when conducting a breach in support of an attack:

- The commander for Alpha Company receives a specified task from the CAB OPORD to secure the CAB's objective and deny the enemy's ability to reposition forces against Bravo Company (CAB's main effort).
- The enemy force on the objective have been in position for 24 to 36 hours by the time friendly forces cross the LD. Enemy vehicles have hull down fighting positions; and infantry squads have prepared fighting positions. Protective obstacles consisting of triple strand concertina wire and single impulse fuze antipersonnel mines are located 25 to 50 meters in front of the vehicle and infantry squad positions. The enemy has emplaced a fixing obstacle that is approximately 120 to 150 meters in depth. This obstacle consists of triple strand concertina wire and mixed single impulse fuze antipersonnel and AT mines. These mines may be buried 6 to 8 inches deep in the first row.
- Alpha Company is task organized with two tank platoons (1st platoon has a plow and roller, 2d platoon has one plow tank), one Bradley platoon, and one engineer platoon. The engineer platoon consists of three engineer squads with four Bradley fighting vehicles and one assault breacher vehicle (ABV).

5-147. The Alpha company commander and engineer platoon leader conduct a mission analysis and reverse planning to develop a course of action. The key elements of the breach tenets to consider during reverse planning are as follows:

- The CAB's scout platoon has been assigned responsibility for collecting information on a named area of interest. Specific information to report includes confirming the location, disposition, and composition of the obstacles.
- Enemy vehicle and squad positions on the objective are destroyed sequentially from East to West. Breaching the protective obstacles in front of these enemy positions requires the assault force to have mobility assets (tank plow).
- The breach force creates one breach lane through the enemy's fixing obstacle. The obstacle composition favors the use of mine clearing line charge (MICLICs) as the primary breach

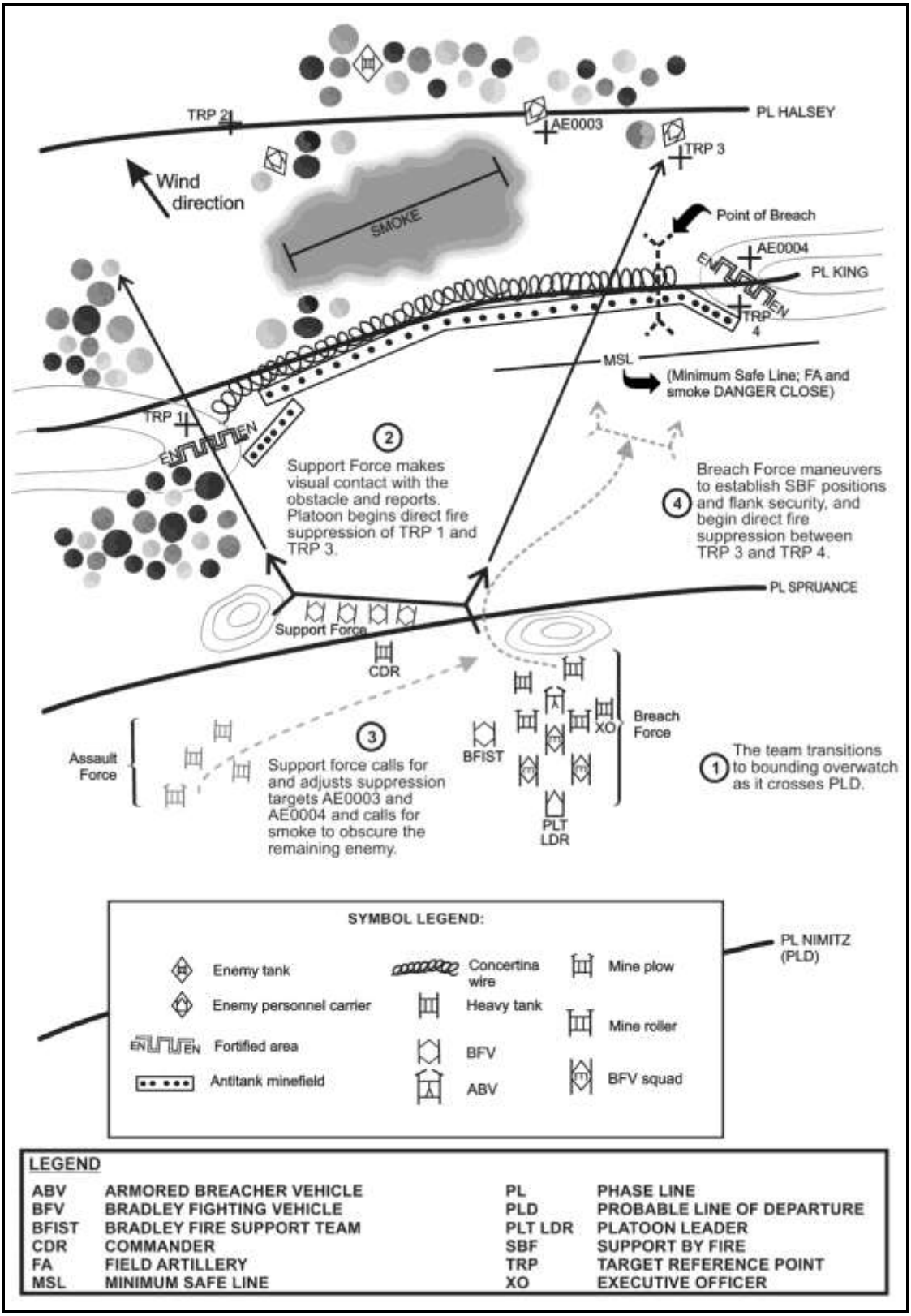
method. The soil conditions favor the use of ABV, tank plows or rollers as a proofing method. The depth of the obstacle requires a minimum of two MICLICs to create one lane.

- Alpha company has priority of fires during this phase of the CAB's operation. A total of 16 minutes of smoke have been allocated to Alpha Company. The breach force plans to use self-obscuration with smoke pots and vehicle smoke grenades. The company rehearses the mission to develop accurate triggers to initiate, build, and sustain obscuration throughout the reduction of the obstacle by the breach force.
- The enemy positions are approximately 800 to 1100 meters from the far side of the obstacle with infantry squads located 400 meters from the left and right limits of the obstacle. A friendly platoon-sized maneuver element and the engineer platoon provide adequate near and far side security at the point of breach.
- Effective suppression requires a platoon sized element to prevent the enemy vehicles and squads from repositioning and massing of fires on the breach force.

5-148. The Alpha company commander completes his analysis of the course of action, and issues the OPORD. Initially the CDR and XO are located with the support force. Once the assault is initiated, the commander will follow the assault element through the lane and the XO will move with the support force. The breach organization and key tasks to subordinate units are as follows:

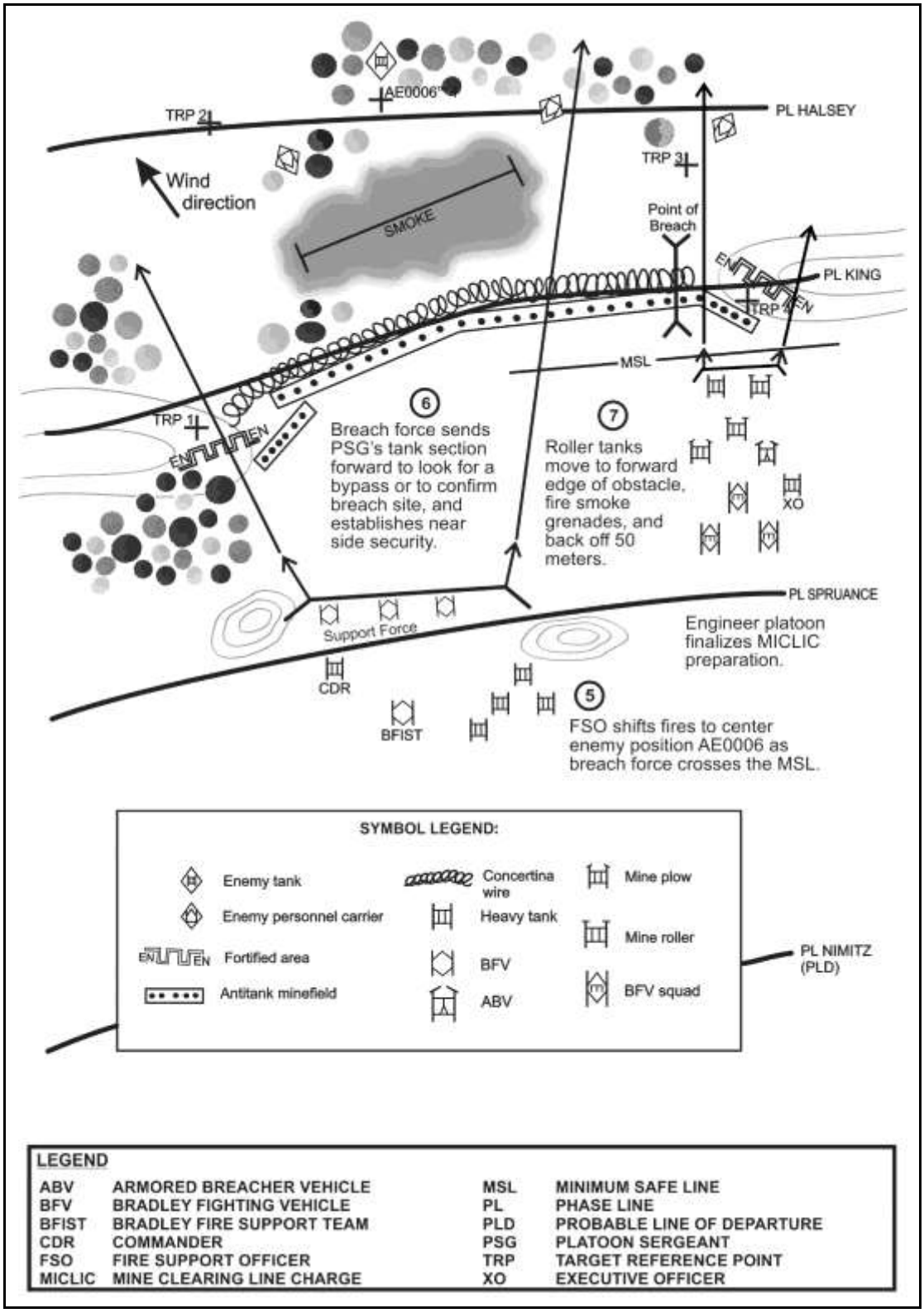
- The 1st tank platoon (+) – Breach force. The breach force consists of a tank platoon with plow and roller, and the engineer platoon. The breach force accomplishes the following:
  - Identifies the point of breach.
  - Confirms the location, composition and disposition of the obstacle.
  - Breaches, proofs, and marks one lane through the obstacle.
  - Secures near and far side of the point of breach to protect the assault force.
- The 2d tank platoon – Assault force. The assault force is equipped with four tanks with one tank plow. The assault force accomplishes the following:
  - Secures the far side of the obstacle.
  - Prepares to breach protective obstacles.
  - Destroys the remaining elements of the enemy platoon and seizes the objective.
- The 3rd Bradley platoon – Support force. The support force accomplishes the following:
  - Suppresses enemy platoon on the objective to protect the breach force.
  - Follows behind 2d platoon and clears enemy dismounted positions on the objective.

5-149. Figures 5-5 through figure 5-9, on pages 5-29 through 5-33, illustrates a company team breaching an obstacle during an attack.



LEGEND			
ABV	ARMORED BREACHER VEHICLE	PL	PHASE LINE
BFV	BRADLEY FIGHTING VEHICLE	PLD	PROBABLE LINE OF DEPARTURE
BFIST	BRADLEY FIRE SUPPORT TEAM	PLT LDR	PLATOON LEADER
CDR	COMMANDER	SBF	SUPPORT BY FIRE
FA	FIELD ARTILLERY	TRP	TARGET REFERENCE POINT
MSL	MINIMUM SAFE LINE	XO	EXECUTIVE OFFICER

Figure 5-5. Company team sets the conditions for the breach



LEGEND			
ABV	ARMORED BREACHER VEHICLE	MSL	MINIMUM SAFE LINE
BFV	BRADLEY FIGHTING VEHICLE	PL	PHASE LINE
BFIST	BRADLEY FIRE SUPPORT TEAM	PLD	PROBABLE LINE OF DEPARTURE
CDR	COMMANDER	PSG	PLATOON SERGEANT
FSO	FIRE SUPPORT OFFICER	TRP	TARGET REFERENCE POINT
MICLIC	MINE CLEARING LINE CHARGE	XO	EXECUTIVE OFFICER

Figure 5-6. Company team establishes security

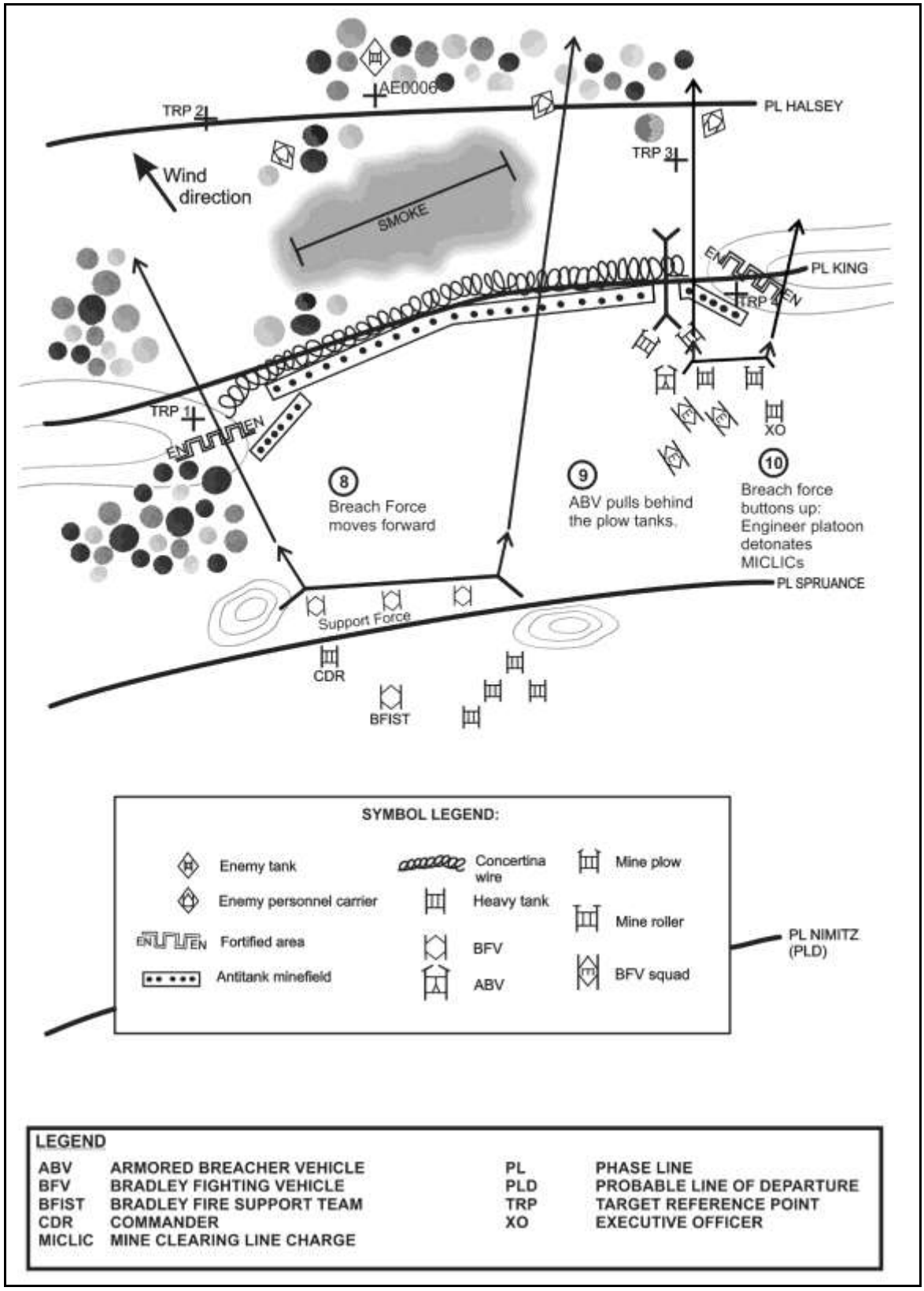


Figure 5-7. Company team conducts the breach

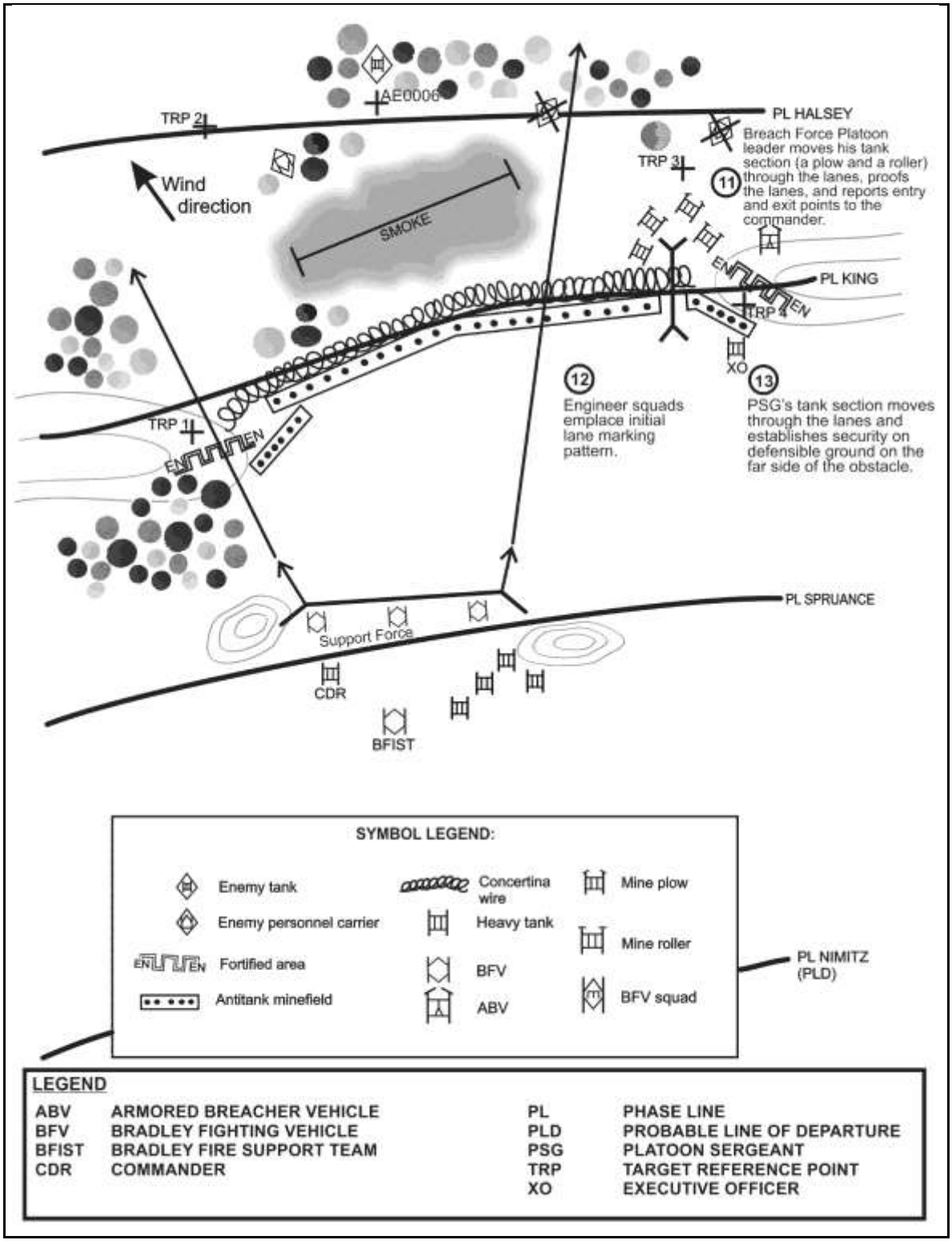


Figure 5-8. Breach force proofs lane and establishes far side security

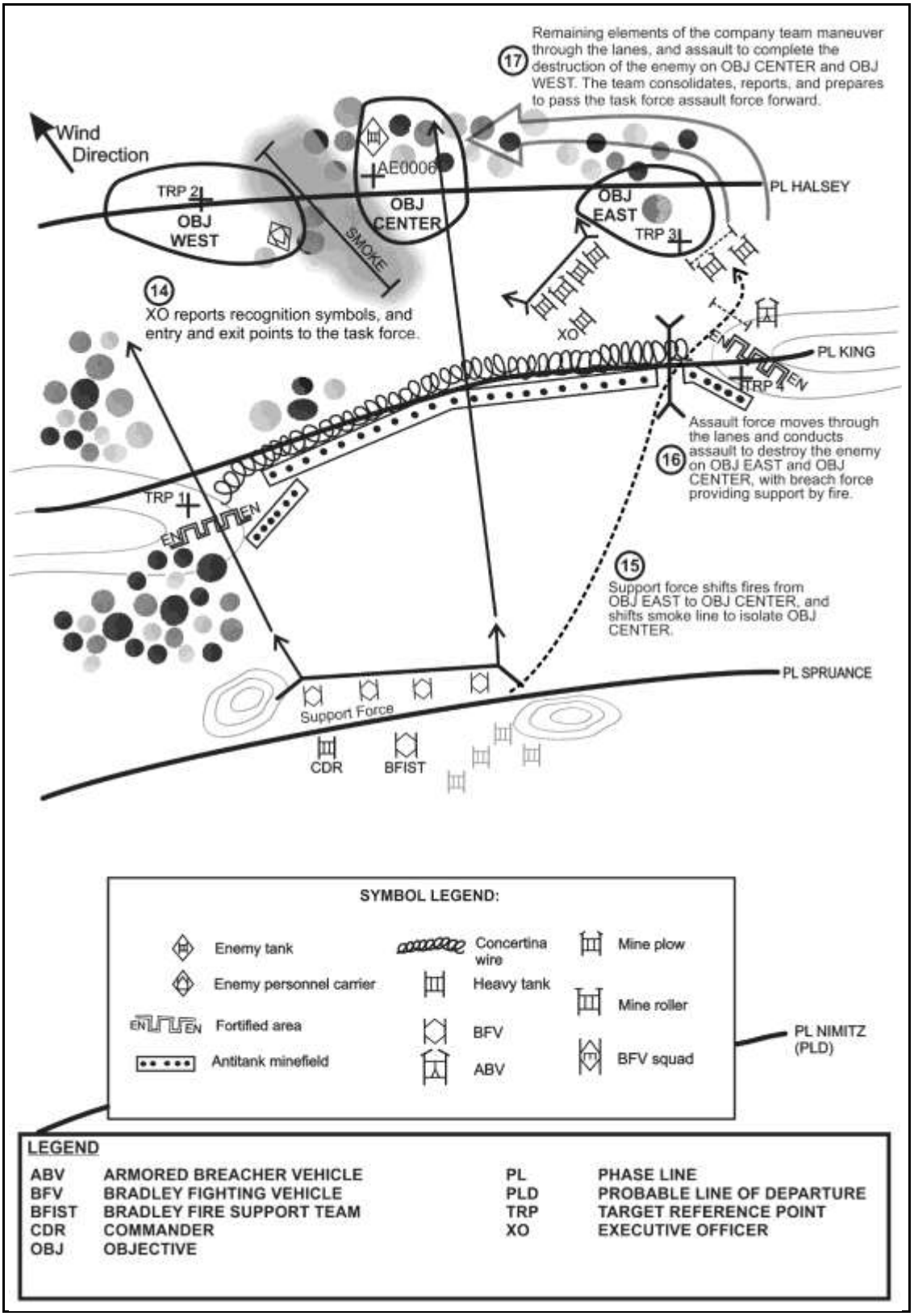


Figure 5-9. Assault force conducts assault and secures the objective

BREACHING METHODS

5-150. The company team can create a lane by itself if it is equipped with the assets required to breach the type of obstacle encountered. If the company team does not have this capability, it may be required to provide close-in protection for attached engineers with breaching assets. Three breaching methods are as follows:

- **Mechanical.** This breaching usually occurs with mine plows or mine rakes.
- **Explosive.** This breaching employs such means as the MICLIC, M173 line charge, or ¼-pound blocks of trinitrotoluene.
- **Manual.** This breaching occurs with Soldiers probing by hand or using such items as grappling hooks, shovels, picks, axes, and chain saws. Manual breaching is the least preferred method.

5-151. In extreme cases, the commander may order an obstacle to breach by forcing through. This technique requires the breach force to move in column formation through the obstacle location. If available, a disabled vehicle can be pushed ahead of the lead breach vehicle in an attempt to detonate mines.

CREATING AND PROOFING LANE

5-152. The mine plow attached to tanks is the breaching device most commonly employed by the company team. The battalion or company commander may allocate one to three plows per tank platoon. When properly equipped and supported, the tank platoon can create up to two lanes through an obstacle.

5-153. Plow tanks lead the breach force. Immediately following them are vehicles that proof the lane; these are usually tanks equipped with mine rollers. This process ensures that the lane is clear.

5-154. If the location and dimensions of the obstacle are unknown, the breach element may choose to lead with tanks equipped with mine rollers to identify the beginning of the obstacle.

MARKING LANE

5-155. After the lane is created and proofed, it can be marked to ensure safe movement by vehicles and personnel; this is critical for follow-on forces that may not know the exact location of the cleared lane. Distinctive markers must show where the lane begins and ends. A visible line down the center is effective. Another technique is to mark both sides of the breached lane.

5-156. To minimize the necessary breaching time, the proofing vehicle may simultaneously mark the lane. Unit SOPs dictate marking methods and materials, which commonly include the following:

- Cleared lane mechanical marking system.
- Pathfinder system.
- Engineer stakes with tape.
- Guides.
- Chemical lights.
- Expended shell casings.

COMPLETING BREACH

5-157. Throughout the operation, the breach element provides continuous updates of the breach force's progress to higher headquarters and other elements involved in the breach. They coordinate with the support force for suppressive fires.

5-158. After marking is complete, the breach element uses voice and digital systems to report the location of the lane and the method of marking to expedite the movement of the assault force. Digital overlays enable units to move quickly to the breach lanes using the position navigation or global positioning system.

5-159. The assault force often moves behind the breach force and closely follows the breach vehicles through the new lane.

ATTACHMENTS

5-160. The types and quantities of these attachments depend on the mission and the number, size, and type of organizations requiring support. These attachments and assets are used to breach and reduce obstacles.

COMBAT ENGINEERS

5-161. The most versatile of all breaching assets, combat engineers can conduct explosive or manual breaches, proof and mark lanes through an obstacle, and provide guides during breaching operations. While it conducts breaching and proofing operations, however, the squad is vulnerable to enemy direct and indirect fires and must be secured by tanks or other BFVs. The engineer squad is equipped with a BFV and organic weapons that provide far more flexibility and safety than that previously provided by the M113.

MECHANIZED INFANTRY PLATOON OR TANK PLATOON

5-162. If other breaching assets are unavailable, a mechanized Infantry or tank Platoon can conduct explosive breaches (with hand-emplaced charges) or use manual breaching kits (usually consisting of grappling hooks, gloves, and wire cutters). At the same time, however, employment of either type of platoon organization in breaching operations has distinct disadvantages. The pace of the breach is slow, and the operation leaves the platoon vulnerable to enemy attack.

ARMORED VEHICLE LAUNCHED BRIDGE

5-163. Units employ the armored vehicle launched bridge (AVLB)/Wolverine primarily to cross short gaps, such as narrow streams, AT ditches, craters, canals, or partially blown bridges. Its span is 18.3 meters using prepared abutments and 17 meters (57 feet) with unprepared abutments. The capacity of the AVLB is one military load class 60 (70 with improved bridge) vehicle. The capacity of the Wolverine Bridge is military load class 70 traffic over gaps of ups to 24 meters (57 feet).

ARMORED COMBAT EARTHMOVER

5-164. Using its blade, the armored combat earthmover (ACE) can reduce berms and AT ditches. Although an ACE can be used to reduce a scatterable minefield, it should only be used as a last resort. The technique utilized by the ACE to perform these operations is known as "skimming" in which the vehicle uses its blade to skim the ground's surface. The vehicle is further limited by its one-man crew.

ASSAULT BREACHER VEHICLE

5-165. The ABV is a single-platform minefield breaching, clearing, proofing, and marking system built on an M1A1 tank chassis that provides explosive and mechanical reduction capabilities. It weighs approximately 63 tons and has a cruising speed of 29 miles per hour (47 kilometers per hour), which is comparable with the M1A1 tank. The ABV is operated by a vehicle commander and driver. A .50-caliber machine gun is externally mounted at the commander's weapon station. The ABV is configured with two MK-155 linear demolition charge launchers (two M58 linear demolition charges); an integrated lane-marking system; a full-width mine plow; and combat dozer blade, surface mine plow, and rapid ordnance removal system attachments. The linear demolition charge system contains two single-shot launchers.

5-166. The MICLIC is fired 62 meters from the obstacle to get the full 100 meters of depth. The charge creates two skip zones, where the mines are not detonated, on the right and left side of the center line of the cleared lane. The skip zones, which are about 1.5 meters wide, necessitate the proofing of all MICLIC lanes.

5-167. The MICLIC is effective against pressure-activated AT mines and against mechanically activated antipersonnel mines. Effectiveness is limited against magnetically activated mines, including scatterable mines, and those with multi-impulse (double-impact) or time-delay fuse. The MICLIC is not effective on severely broken ground where the line charge cannot lay flat. When detonated, the MICLIC has a danger area with a radius of 1600 meters.

ASSETS

5-168. The following paragraphs summarize the capabilities and limitations of the breaching assets available to the company team.

MINE PLOW

5-169. The company team uses the mine plow (also known as the mine-clearing blade) to breach and proof minefields. The system affords good survivability and, when fully operational, a tank equipped with a mine plow can quickly clear two 68-inch-wide lanes, one in front of each track.

Note. The plow's dog bone assembly detonates the tilt rods of mines in the area between the two plowed lanes; however, only plows equipped with the improved dog-bone assembly project a magnetic signature and defeat tilt-rod and magnetic mines.

5-170. The plow is dropped at least 100 meters before the tank reaches the minefield. It is not lifted until the tank is at least 100 meters past the far edge of the minefield. The plow needs 18 inches of soil depth to be effective, limiting the tank's speed to 10 mph or less in the lane. The mine plow is used only in a straight line; it does not work well on hard, rocky, or uneven ground where it cannot maintain adequate spoil. Mine detonation can cause violent upward movement of the blade; the tank's main gun is traversed to the side during plowing to prevent damage to the gun tube. The plow's lifting straps can become entangled in wire obstacles. Manual lifting of the plow takes at least 10 minutes.

MINE ROLLER

5-171. If breaching is anticipated, the company mounts and employs rollers. Units use the mine roller to identify the forward edges of a minefield and to proof lanes. The roller sweeps a 44-inch path in front of each track and is equipped with an improved dog-bone assembly. It is effective in breaching wire obstacles.

5-172. The roller, however, is not effective on broken or uneven ground. The mine roller, like the mine plow, does not defeat magnetic fuse mines unless the mine roller is equipped with the improved dog-bone assembly. The main gun is traversed to the side or rear when contact with a mine is possible or imminent; detonation can throw the roller (or pieces of it) violently upward, possibly damaging the tube.

SECTION IX – GAP CROSSING OPERATIONS

5-173. There are three gap crossings: deliberate, hasty, and covert. Each has a general list of conditions that define their category. As with the categories of breaching operations, all other labels placed upon a crossing are a variation of a deliberate, hasty, or covert gap crossing. The planning requirements for each gap crossing are similar. However, the required degree of detail and necessary conditions for a high degree of success varies based on the type and the unique features associated with a given crossing operation.

5-174. Operational considerations for a company hasty gap crossing are similar to those for a breach, with the company team task organized into support, breach, and assault forces. The primary crossing means in the company team hasty gap crossing is the AVLB or Wolverine, which moves as part of the breach force. Without a vehicle launched bridge, the company team employs an ACE team to fill in or breach through the obstacle. Additionally, if the mechanical method is unavailable, the company team may employ a field expedient method, such as explosives, to facilitate the crossing.

HASTY GAP CROSSING

5-175. A hasty gap crossing (wet or dry) is conducted to maintain the momentum of the maneuver force by quickly massing combat power on the far side of the gap with no intentional pause. To do this, it is critical in the planning process to identify gap locations and their dimensions, and then request and/or allocate the necessary assets to ensure unimpeded movement. Hasty gap crossings are typically for, but are not limited to, gaps 20 meters or less in width and can be overcome by self-bridging assets (organic or augmented). Planned, organized, and executed much like a hasty breaching operation, the unit must consider the integration of the crossing assets (AVLB or Wolverine) in their movement formation; redundancy in crossing means; traffic flow across the gap; and the recovery of the crossing assets. Despite use of the term "hasty," the commander must use all available time and assets to ensure that the conditions are set for the crossing. The crossing is similar to a breach in that suppression and obscuration normally precede any attempt to cross the obstruction.

HASTY (WET) GAP CROSSING

5-176. The depth and width of the wet gap, bank conditions, and current velocity are major factors in determining the maneuver unit's ability to conduct a hasty (wet) gap crossing. These factors determine if the maneuver force can cross by fording or swimming, if expedient materials can be used, or if specific bridging assets are required. Identifying wet gaps early and deploying the required resources allow hasty crossings of known or anticipated gaps to occur. Hasty wet-gap crossings are decentralized operations to cross inland bodies of water such as canals, lakes, or rivers. These operations include crossing by tactical bridging or fording operations.

HASTY (DRY) GAP CROSSING

5-177. Typical dry gap obstacles that maneuver forces encounter include AT ditches, craters, dry river beds, partially blown bridges, and similar obstacles. Maneuver forces can use the M9 ACE to push down the sides of ditches or fill in craters. Substantial fill material placed in dry gaps allows the passage of tracked vehicles. The crossing site can be improved and maintained for wheeled traffic use by follow-on forces. The AVLB, Wolverine, JAB, or REBS are also well suited for hasty (dry) gap crossings. As with any hasty crossing, consideration must be given to the need for replacement bridging so that the maneuver unit can maintain its assets for follow-on, gap-crossing requirements. Operational considerations for a company team hasty gap crossing are similar to those for a breach, with the company team task organized into support, breach, and assault forces

ASSAULT FORCE

5-178. The assault force conducts the initial assault across the body of water. Assault boats or air assault aircraft transport the assault force across the body of water. There, the assault force usually seizes immediate objectives on the far side to secure the crossing site for other elements. If it has the capability, the assault force then continues the advance from the exit bank to the final objective. Infantry elements establish local security on the exit bank to permit development of the crossing site. Engineers move with the assault force to breach obstacles and open or improve trails.

SUPPORT FORCE

5-179. The support force usually consists of engineer elements and mission command elements from the controlling headquarters. It develops the crossing site, emplaces the crossing means (if applicable), and controls units moving into and away from the crossing site. The controlling commander may position the support force where it can assist the assault force in the direct assault on the crossing site. The engineers provide these types of support for crossing operations to—

- Improve mobility and reduce obstacles at the entrance and exit to the crossing site.
- Improve fording sites.
- Emplace assault boats, rafts, ferries, or bridges as the means of crossing the body of water. Bridges used by supporting engineers include the AVLB, Wolverine, and ribbon or medium girder bridges. In addition, engineers might repair an existing bridge so that it can support the crossing operation.

FOLLOW AND SUPPORT FORCE

5-180. As the follow and support force, the company team's primary mission is to provide operations security as the assault force moves to the far side of the water obstacle and seizes its immediate objectives. The company team does this mainly by suppressing defending enemy elements with both direct and indirect fires, and by firing or calling for smoke to screen the crossing site from enemy observation. It prepares to take over the assault force's mission.

COVERT GAP CROSSING

5-181. The covert gap crossing applies the same gap-crossing fundamentals as the other gap-crossing types; however, it is focused on the crossing fundamental of surprise. Surprise is the primary element of the covert crossing. The requirement to execute the crossing without enemy detection is the element that distinguishes it from the other types of crossings. It can be used in a variety of situations to support various operations, but

should be considered (as opposed to deliberate or hasty) only when there is a need or opportunity to cross a gap without being discovered.

SECTION X – DETAINEE PROCESSING AND EVACUATION

5-182. *Detainee* is a term used to refer to any person captured or otherwise detained by an armed force. A detainee is classified, in accordance with U.S. policy (see JP 3-63) as an enemy combatant—either lawful or unlawful, retained personnel, or civilian internee. Lawful combatants are EPWs upon capture, and are entitled to "combatant immunity" for their lawful pre-capture warlike acts. Regardless of detainees' legal status, US forces must treat all detainees humanely and be prepared to properly control, maintain, protect, and account for detainees following U.S. law, the law of war, and U.S. policy.

5-183. Detainees and captured enemy equipment and materials can be excellent sources of combat information and intelligence. This information, however, will be of tactical value only if prisoners and materials are processed and evacuated to the rear quickly. In any tactical situation, the company team will have specific procedures and guidelines for handling prisoners and captured materials; these measures are prescribed in team and task force SOPs and in the commander's OPORD. Basic principles for handling detainees are covered by the "five-S and T" procedures: search, segregate, silence, speed, safeguard and tag. However, the tempo of an operation may not allow the company team to tag prisoners and equipment. The company team commander must weigh operational requirements against completing the "five-S and T" steps. Some circumstances may only allow for the company team to complete only the "search" step in handling detainees consistent with the obligation to safeguard detainees and then pass the prisoners along to follow on forces to complete processing of detainees. Failure to properly tag a detainee and document the circumstances of detention, however, increases the likelihood of premature release of the detainee and increased investigative scrutiny of the capturing unit in the wake of a claim of detainee abuse.

5-184. Capturing units may conduct tactical questioning for combat information relative to the commander's critical information requirements. Tactical questioning does not include interrogation techniques; only trained, qualified interrogators may interrogate detainees. Interrogation is the systematic effort to procure information to answer specific collection requirements by direct and indirect questioning of a detainee. Tactical questioning, on the other hand, is direct questioning by DOD personnel of a detainee to obtain time-sensitive tactical intelligence at or near the point of capture or detention.

5-185. In addition to initial processing, the capturing element is responsible for providing guards and transportation to move prisoners to a designated EPW collection point. Prisoners normally will be carried in restraints on vehicles already heading toward the rear, such as tactical vehicles being moved for repair or replacement or supply vehicles returning from LOGPAC operations. The capturing element has responsibility for feeding the EPWs, providing them with medical treatment, and safeguarding them until they reach the collection point.

5-186. At the collection point, the 1SG generally assumes responsibility for providing security for the EPWs and for transporting them to the task force trains. He must be prepared to use any available personnel as guards, including the walking wounded or Soldiers moving to the rear for reassignment.

Chapter 6

Direct Fire Planning and Control

Suppressing or destroying the enemy with direct fires is fundamental to success in close combat. These fires must be controlled so that the effects are distributed over the entire target and massed as required. Because fire and movement are complementary components of maneuver, the commander must be able to mass the fires of all available resources at critical points and times to be successful on the battlefield. This chapter discusses principles of direct fire control, the fire control process, direct fire planning, and direct fire control.

SECTION I – FIRE CONTROL TECHNIQUES

6-1. To successfully bring direct fires against an enemy force, commanders and leaders must continuously apply the steps of the fire control process. At the heart of this process are two critical actions: rapid, accurate target acquisition and the massing of fire to achieve decisive effects on the target.

6-2. Target acquisition is the detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons. Massing of fires is defined by the terminal effect on the enemy, not by the number of systems or rounds fired.

6-3. Massing fires means placing accurate fires on multiple enemy threats simultaneously. Firing at multiple targets in depth prevents the enemy from dealing with any single threat and maneuvering or massing his fires against it.

FIRE CONTROL PROCESS

6-4. The following discussion examines target acquisition and massing of fires using these basic steps of the fire control process:

- Identify probable enemy locations and determine the enemy scheme of maneuver.
- Determine where and how to mass fires.
- Orient forces to speed target acquisition.
- Shift fires to refocus or redistribute.

IDENTIFY PROBABLE ENEMY LOCATIONS AND DETERMINE ENEMY SCHEME OF MANEUVER

6-5. The commander and subordinate leaders plan and execute direct fires based on their estimate of the situation. An essential part of this estimate is analyzing the terrain and the enemy force, which aids the commander in visualizing how the enemy will attack or defend a particular piece of terrain. A defending enemy's defensive positions or an attacking enemy's support positions are normally driven by terrain. Typically, there are limited points on a piece of terrain that provide both good fields of fire and adequate cover for a defender. Similarly, an attacking enemy has only a limited selection of avenues of approach that provide adequate cover and concealment.

6-6. Coupled with available intelligence, an understanding of the effects of a specific piece of terrain on maneuver assists the commander in identifying probable enemy locations and likely avenues of approach both before and during the fight. (See figure 6-1.) The commander may use any or all of the following products or techniques in developing and updating the analysis:

- SITTEMP based on the analysis of terrain and enemy.

- SPOTREP or contact report on enemy locations and activities.
- Reconnaissance of the AO.

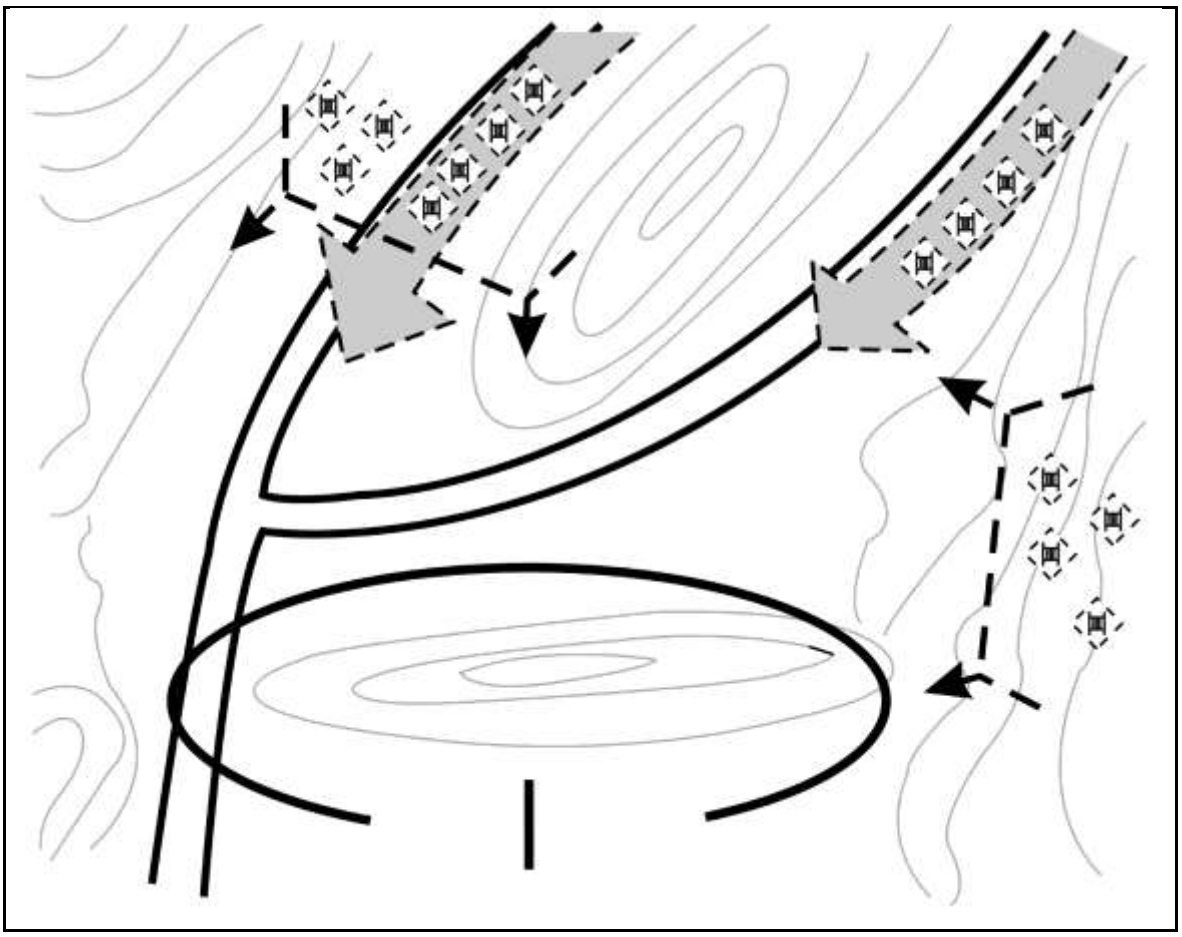


Figure 6-1. Example of identifying probable enemy locations and determining enemy scheme of maneuver

DETERMINE WHERE AND HOW TO MASS FIRES

6-7. To achieve decisive effects, friendly forces must mass their fires. Effective massing requires the commander both to focus the fires of subordinate elements and to distribute the effects of the fires. Based on his estimate of the situation and his concept of the operation, the commander identifies points where he wants to, or must, focus the unit's fires. Most often, these are locations identified as probable enemy positions or points along likely avenues of approach where the unit can mass fires. Because platoons may not initially be oriented on the point where the commander wants to mass fires, he may issue a fire command to focus the fires on TRPs. At the same time, the commander must use direct fire control measures to effectively distribute the fires of his elements, which are now focused on the same point. (See figure 6-2 on page 6-3.)

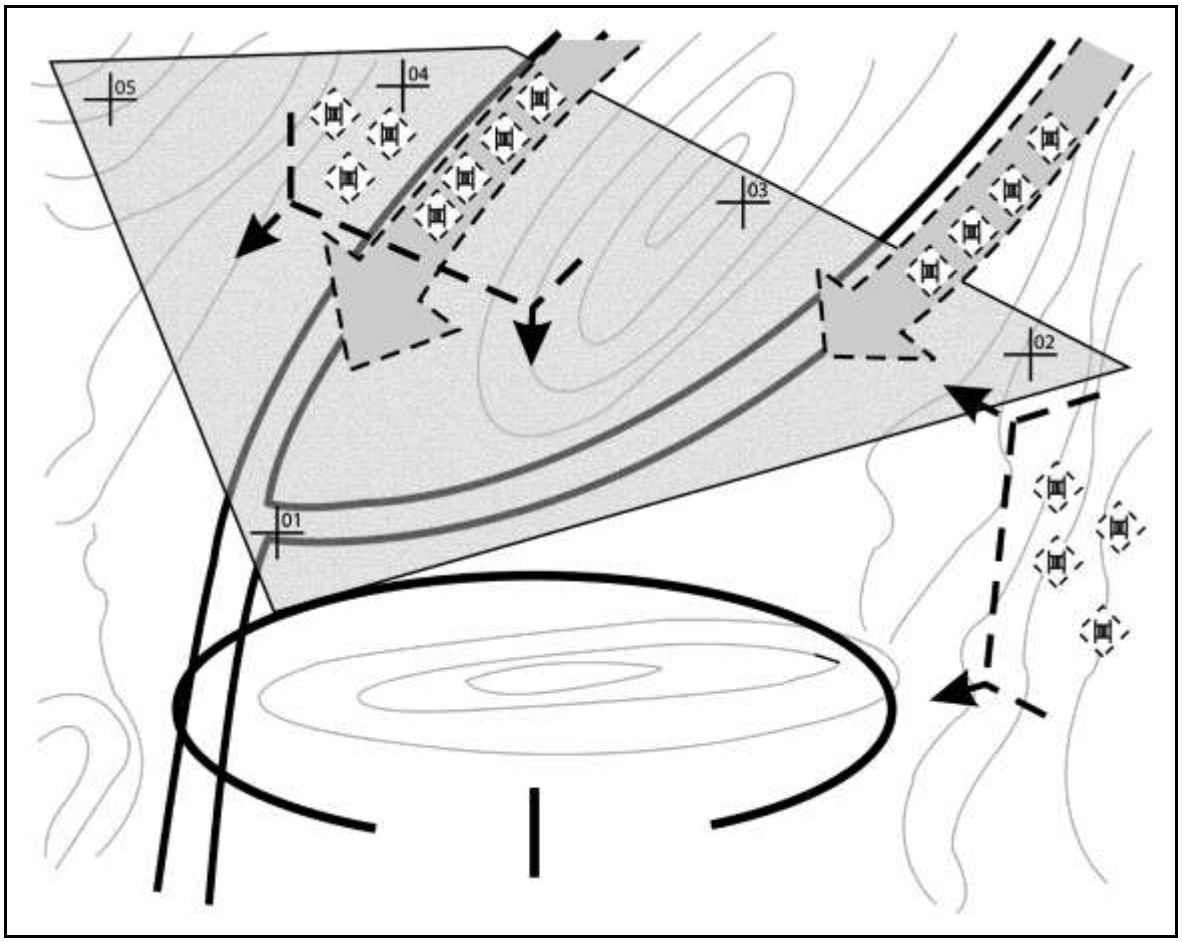


Figure 6-2. Example of determining where and how to mass fires

ORIENT FORCES TO SPEED TARGET ACQUISITION

6-8. To effectively engage the enemy with direct fires, friendly forces must rapidly and accurately acquire enemy elements. Orienting friendly forces on probable enemy locations and likely avenues of approach speeds target acquisition. Conversely, failure to orient subordinate elements results in slower acquisition; this greatly increases the likelihood that enemy forces will be able to engage first. The clock direction orientation method, which is prescribed in most unit SOPs, is good for achieving all-around security; however, it does not ensure that friendly forces are most effectively oriented to detect the enemy. To achieve this critical orientation, the commander typically designates TRPs on or near probable enemy locations and avenues of approach; he orients his subordinate elements using directions of fire or sectors of fire during engagement area development. Normally, the gunners on crew-served weapons scan the designated direction, sector, or area while other crewmen observe alternate sectors or areas to provide all-around security. (See figure 6-3.)

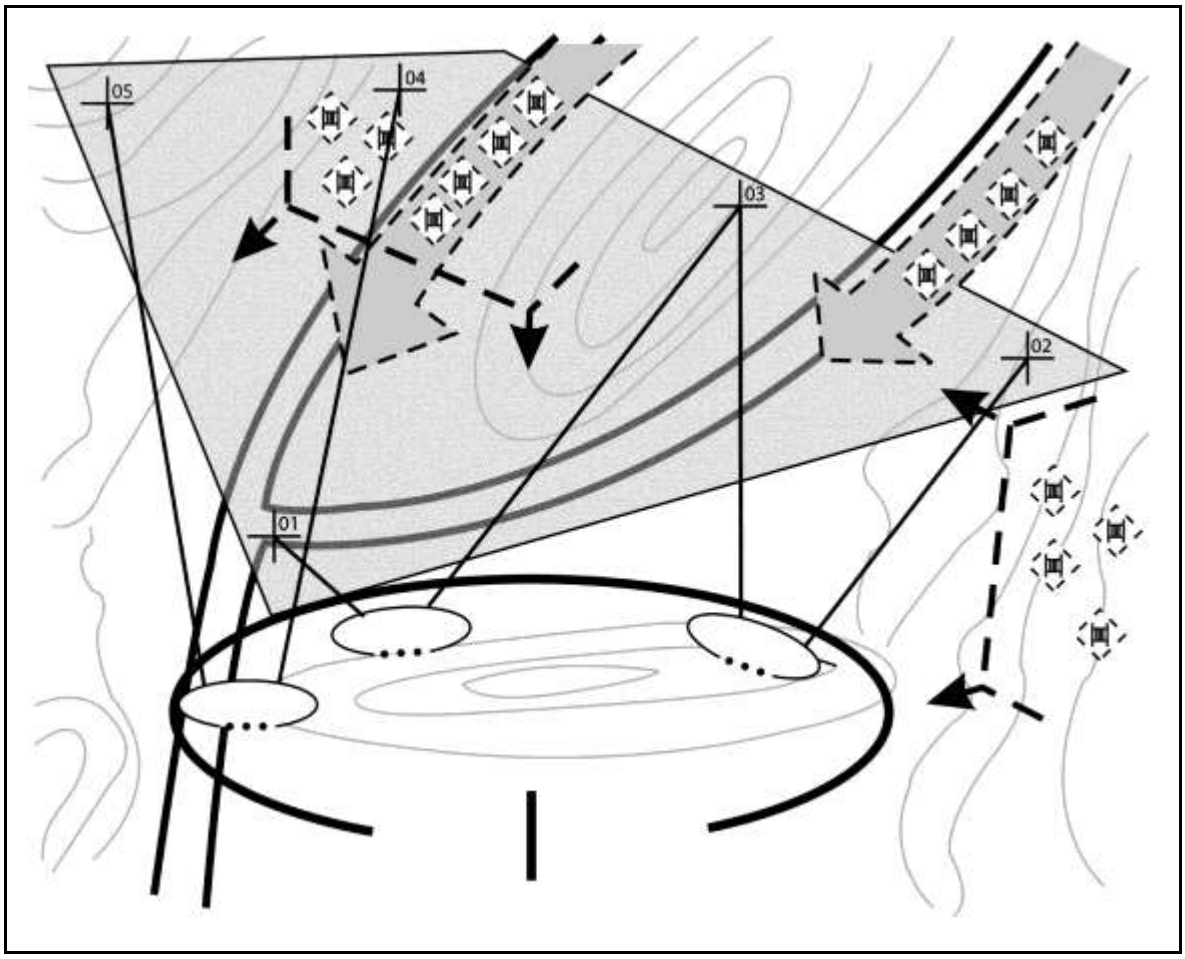


Figure 6-3. Example of orienting forces to speed target acquisition

SHIFT FIRES TO REFOCUS AND REDISTRIBUTE

6-9. As the engagement proceeds, leaders must shift fires to refocus and redistribute the effects based on their evolving estimate of the situation. Situational awareness becomes an essential part of the fire control process at this point. The commander and subordinate leaders apply the same techniques and considerations, including fire control measures used earlier to focus and distribute fires. A variety of situations dictates shifting of fires, including the following:

- Appearance of an enemy force posing a greater threat than the one currently being engaged.
- Extensive attrition of the enemy force being engaged, creating the possibility of target overkill.
- Attrition of friendly elements that engage the enemy force.
- Change in the ammunition status of the friendly elements that engage the enemy force.
- Increased fratricide risk as a maneuvering friendly element closes with the enemy force being engaged.

PRINCIPLES OF DIRECT FIRE CONTROL

6-10. Effective fire control requires a unit to acquire the enemy and mass the effects of fires rapidly to achieve decisive results in the close fight. When planning and executing direct fires, the commander and subordinate leaders must know how to apply several fundamental principles. The purpose of direct fire is not to restrict the actions of subordinates. Applied correctly, direct fire helps the company team accomplish its primary goal in any direct fire engagement; that is, to acquire first and shoot first. These principles give subordinates the freedom to act quickly upon acquisition of the enemy. (Refer to TC 3-20.31-4 for more information) This discussion focuses on the following principles:

- Mass the effects of fire.
- Destroy the greatest threat first.
- Avoid target overkill.
- Employ the best weapon for specific target.
- Minimize exposure.
- Plan and implement fratricide avoidance measures.
- Plan for limited visibility conditions.
- Plan for degraded capabilities.

MASS EFFECTS OF FIRE

6-11. The company team must mass its fires to achieve decisive results. Massing entails focusing fires at critical points and distributing the effects. Random application of fires is unlikely to have a decisive effect. For example, concentrating the company team's fires at a single target may ensure its destruction or suppression; however, that fire control technique will probably not achieve a decisive effect on the enemy formation or position.

DESTROY GREATEST THREAT FIRST

6-12. The order in which the company team engages enemy forces is in direct relation to the danger they present. The threat posed by the enemy depends on their weapons, range, and positioning. Presented with multiple targets, a unit will, in almost all situations, initially concentrate fires to destroy the greatest threat and then distribute fires over the remainder of the enemy force.

AVOID TARGET OVERKILL

6-13. A company team should use only the amount of fire required to achieve necessary effects. Target overkill wastes ammunition and ties up weapons that are better employed acquiring and engaging other targets. The idea of having every weapon engage a different target, however, must be tempered by the requirement to destroy the greatest threats first.

EMPLOY BEST WEAPON FOR SPECIFIC TARGET

6-14. Using the appropriate weapon for the target increases the probability of rapid enemy destruction or suppression; at the same time, it saves ammunition. The company team has many weapons with which to engage the enemy. Target type, range, and exposure are key factors in determining the weapon and ammunition that should be employed, as are weapons and ammunition availability and desired targets effects. Additionally, leaders should consider individual crew capabilities when deciding on the employment of weapons. The commander task-organizes and arrays his forces based on the terrain, enemy, and desired effects of fires. For example, when he expects an enemy dismounted assault in restricted terrain, the commander would employ his Infantry squads, taking advantage of their ability to best engage numerous targets.

MINIMIZE EXPOSURE

6-15. Units increase their survivability by exposing themselves to the enemy only to the extent necessary to engage them effectively. Natural or man-made defilade provides the best cover from lethal direct fire munitions. Crews and squads minimize their exposure by constantly seeking effective available cover,

attempting to engage the enemy from the flank, remaining dispersed, firing from multiple positions, and limiting engagement times.

PLAN AND IMPLEMENT FRATRICIDE AVOIDANCE MEASURES

6-16. The commander must be proactive in reducing the risk of fratricide/friendly fire and noncombatant casualties. He has numerous tools to assist him in this effort: identification training for combat vehicles and aircraft, the unit's weapons safety posture, the weapons control status, recognition markings, and a common operational picture. Knowledge and employment of applicable ROE are the primary means of preventing noncombatant casualties.

Note. Because it is difficult to distinguish between friendly and enemy Soldiers, the commander must constantly monitor the position of friendly Soldiers.

PLAN FOR LIMITED VISIBILITY CONDITIONS

6-17. At night, limited visibility fire control equipment enables the company team to engage enemy forces at nearly the same ranges that are applicable during the day. Obscurants such as dense fog, heavy smoke, and blowing sand; however, can reduce the capabilities of thermal and infrared (IR) equipment. The commander should, therefore, develop contingency plans for such extreme limited visibility conditions. Although decreased acquisition capabilities have minimal effect on area fire, point target engagements will likely occur at decreased ranges. Typically, BPs, whether offensive or defensive, must be adjusted closer to the area or point where the commander intends to focus fires. Another alternative is using visual or IR illumination when there is insufficient ambient light for passive light intensification devices.

Note. Vehicles equipped with thermal sights can assist squads in detecting and engaging enemy forces in conditions such as heavy smoke and low illumination.

PLAN FOR DEGRADED CAPABILITIES

6-18. Leaders initially develop plans based on their units' maximum capabilities; they make backup plans for implementation if casualties or weapon damage or failure. While leaders cannot anticipate or plan for every situation, they should develop plans for what they view as the most probable occurrences. Building redundancy into these plans, such as having two systems observe the same sector, is an invaluable asset when the situation (and the number of available systems) permits. Designating alternate sectors of fire provides a means of shifting fires if adjacent elements are out of action.

SECTION II – DIRECT FIRE PLANNING

6-19. This section discusses direct fire planning that includes an overview and SOPs. Direct fire planning is fundamentally the same for both offensive and defensive task. The challenge for the leaders in the offense is to control the focus and distribution of fires on the move against a generally static enemy. While in the defense, the goal is to build an engagement area where the leaders are able to mass fires by properly focusing and distributing the company's firepower.

OVERVIEW

6-20. Leaders plan direct fires to distribute and control their fire. Determining where and how the company team can mass fires is an essential step in this process.

6-21. Based on where and how they want to focus and distribute fires, leaders can establish weapons-ready postures for their elements as well as triggers for initiating fires. During mission preparation, leaders plan and conduct rehearsals of direct fires (and of the fire control process) based on the estimate of the situation.

6-22. The commander plans direct fires in conjunction with development of his estimate of the situation and completion of the plan. Determining where and how the company team can and will mass fires are essential steps as the commander develops his concept of the operation.

6-23. After identifying probable enemy locations, the commander determines points or areas where he can focus combat power. His visualization of where and how the enemy will attack or defend assists him in determining the volume of fires he must focus at particular points to have a decisive effect. If he intends to mass the fires of more than one subordinate element, the commander must establish the means for distributing fires effectively.

6-24. Based on where and how they want to focus and distribute fires, the commander and subordinate leaders can establish weapons-ready postures for company team elements as well as triggers for initiating fires. Additionally, the commander must evaluate the risk of fratricide and establish controls to prevent it; these measures include the designation of recognition markings, weapon control status (WCS), and weapons-safety posture.

6-25. After determining where and how they will mass and distribute fires, the commander and subordinate leaders must orient elements so they can rapidly and accurately acquire the enemy. They can war-game the concept of the operation to determine probable requirements for refocusing and redistributing fires and to establish other required controls. During mission preparation, the commander plans and conducts rehearsals of direct fires (and of the fire control process) based on his estimate of the situation.

6-26. The commander and his subordinate leaders must continue to apply planning procedures and considerations throughout execution. They must be able to adjust direct fires based on a continuously updated estimate of the situation, combining SA with the latest available intelligence. When necessary, they must apply effective direct fire SOPs, which are covered in the following discussion.

STANDARD OPERATING PROCEDURES

6-27. A well-rehearsed direct fire SOP ensures quick, predictable actions by all members of the company team. The commander bases the various elements of the SOP on the capabilities of his force and on anticipated conditions and situations. The commander should adjust the direct fire SOP whenever changes to anticipated and actual mission variables become apparent.

6-28. If the commander does not issue any other instructions, the company team begins the engagement using the SOP. The commander can subsequently use a fire command to refocus or redistribute fires. The following paragraphs discuss specific SOP provisions for focusing fires, distributing fires, orienting forces, and preventing fratricide.

FOCUSING FIRES

6-29. Target reference points are a common means of focusing fires. One technique is to establish a standard respective position for TRPs in relation to friendly elements and then to consistently number the TRPs, such as from left to right. This allows leaders to quickly determine and communicate the location of the TRPs.

DISTRIBUTING FIRES

6-30. Two useful means of distributing the company team's fires are engagement priorities and target array. One technique is to assign an engagement priority, by type of enemy vehicle or weapon, for each type of friendly weapons system. The target array technique can assist in distribution by assigning specific friendly elements to engage enemy elements of approximately similar capabilities. The following are examples for distributing the fires of a company team (one tank platoon, two mechanized Infantry platoons) moving in a wedge or line formation with the tank platoon in the center:

- Tanks engage tanks first, then personnel carriers (PCs).
- BFVs engage PCs first, then other AT weapons.
- If the company team masses fires at the same target, the tank platoon engages tanks; the left flank platoon engages the left half of the enemy formation; and the right flank platoon engages the right half of the enemy formation.

ORIENTING FORCES

6-31. A standard means of orienting friendly forces is to assign a primary direction of fire, using a TRP, to orient each element on a probable enemy position or likely avenue of approach. To provide all-around

security, the SOP can supplement the primary direction of fire with sectors using a friendly based quadrant. The following example SOP elements illustrate these techniques:

- The center (front) platoon's primary direction of fire is TRP 2 (center) until otherwise specified; the platoon is responsible for the front two quadrants.
- The left flank platoon's primary direction of fire is TRP 1 (left) until otherwise specified; the platoon is responsible for the left two friendly quadrants (overlapping with the center platoon).
- The right flank platoon's primary direction of fire is TRP 3 (right) until otherwise specified; the platoon is responsible for the right two friendly quadrants (overlapping with the center platoon).

AVOIDING FRATRICIDE

6-32. A primary means of avoiding fratricide is to establish a standing weapons control status of, WEAPONS TIGHT, which requires positive enemy identification before engagement. The SOP must dictate ways of identifying friendly mechanized Infantry squads and other dismounted elements. Techniques include using arm bands, medical heat pads, or an IR light source or detonating a smoke grenade of a designated color at the appropriate time. Minimizing the risk of fratricide in the company team can be accomplished through FBCB2 (if equipped); however, this does not supplant the company commander's responsibility to plan for fratricide avoidance.

6-33. Finally, the SOP must address the most critical requirement of fratricide prevention—maintaining SA. It must direct subordinate leaders to inform the commander, adjacent elements, and subordinates whenever a friendly force is moving or preparing to move.

SECTION III – DIRECT FIRE CONTROL

6-34. The company commander communicates to his subordinates the manner, method, and time to initiate, shift, and mass fires, and when to disengage by using direct fire control measures. The commander should control his unit's fires so he can direct the engagement of enemy systems to gain the greatest effect. The commander uses IPB and reconnaissance to determine the most advantageous way to use direct fire control measures to mass the effects on the enemy and reduce fratricide from direct fire systems.

FIRE CONTROL MEASURES

6-35. Fire control measures are the means by which the commander or subordinate leaders control fires. Application of these concepts, procedures, and techniques assists the unit in acquiring the enemy, focusing fires on them, distributing the effects of the fires, and preventing fratricide. At the same time, no single measure is sufficient to effectively control fires. At the company team level, fire control measures are effective only if the entire unit has a common understanding of what they mean and how to employ them. The following discussion focuses on the various fire control measures employed by the company team. (See table 6-1.)

Table 6-1. Common fire control measures

Terrain-Based Fire Control Measures	*Threat-Based Fire Control Measures*
Target Reference Point (TRP)	Rule of Engagement (ROE)
Engagement Area (EA)	Weapons Ready Posture
Sector of Fire	Weapons Safety Posture
Direction of Fire	Weapon Control Status (WCS)
Terrain-Based Quadrant	Engagement Priorities
Friendly Based Quadrant	Trigger
Maximum Engagement Line (MEL)	Engagement Techniques
Final Protective Line (FPL)	Target Array
Restrictive Fire Line (RFL)	Fire Patterns

TERRAIN-BASED FIRE CONTROL MEASURES

6-36. The company commander uses terrain-based fire control measures to focus and control fires on a particular point, line, or area rather than on a specific enemy element. The following paragraphs describe the TTPs associated with this control measure.

Target Reference Point

6-37. A *target reference point* is an easily recognizable point on the ground (either natural or man-made) used to initiate, distribute, and controls fires (ADRP 1-02). In addition, when leaders designate TRPs as indirect fire targets, they can use the TRPs when calling for and adjusting indirect fires. Leaders designate TRPs at probable enemy locations and along likely avenues of approach. These points can be natural or man-made. A TRP can be an established site (for example, a hill or a building), or an impromptu feature designated as a TRP on the spot (for example, a burning enemy vehicle or smoke generated by an artillery round). Friendly units can construct markers to serve as TRPs. Ideally, TRPs should be visible in three observation modes (unaided, light intensifying, and thermal) so that all forces can see them. (See figure 6-4.) Examples of TRPs include the following features and objects:

- Prominent hill mass.
- Distinctive building.
- Observable enemy position.
- Destroyed vehicle.
- Ground-burst illumination.
- Smoke round for immediate engagements only; this is the least preferred method.

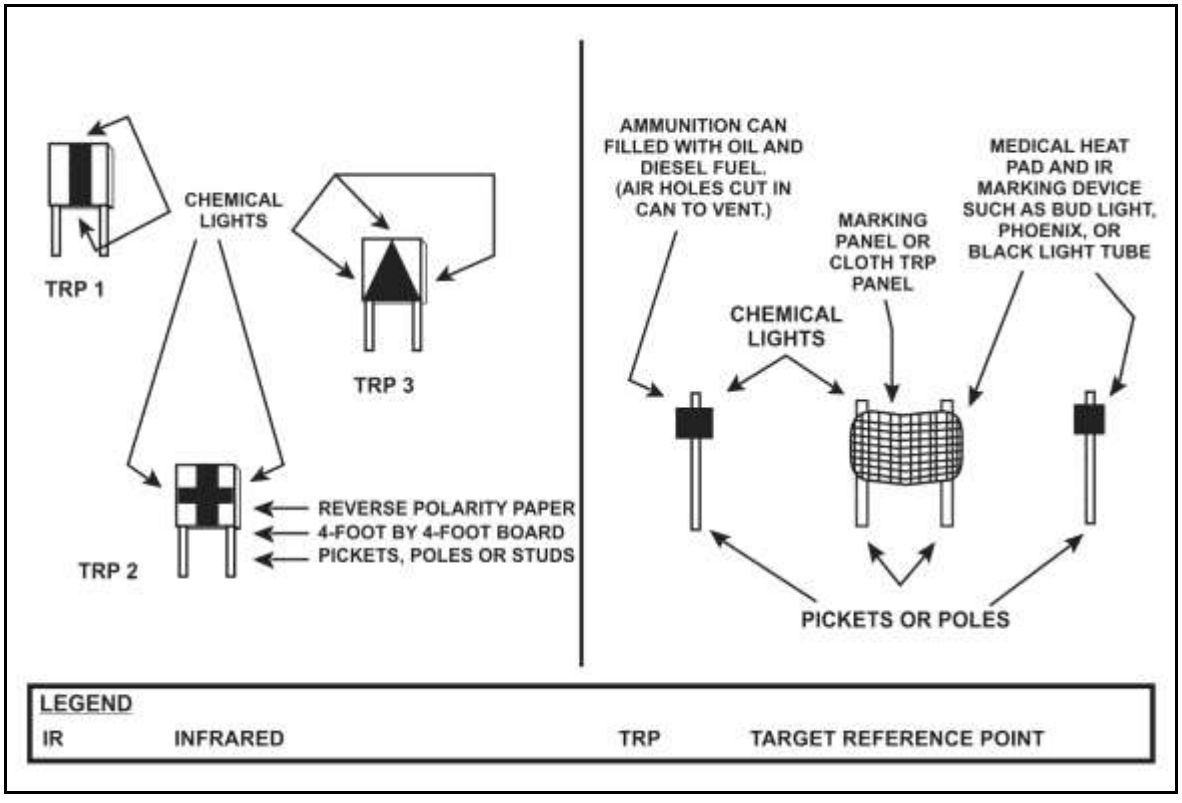


Figure 6-4. Examples of constructed TRP markers

Engagement Area

6-38. An *engagement area* is where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems (FM 3-90-1). The size and shape of the EA is determined by the degree of relatively unobstructed intervisibility available to the unit's weapons systems in their BPs and by the maximum range of those weapons. Typically, commanders delineate responsibility within the EA by assigning each platoon a sector of fire or direction of fire.

Sector of Fire

6-39. A *sector of fire* is that area assigned to a unit, a crew-served weapon, or an individual weapon within which it will engage targets as they appear in accordance with established engagement priorities (FM 3-90-1). Leaders assign sectors of fire to subordinate elements, crew-served weapons, and individual Soldiers to ensure coverage of an area of responsibility. They may limit the sector of fire of an element or weapon to prevent accidental engagement of an adjacent unit. In assigning sectors of fire, commanders and subordinate leaders consider the number and types of weapons available. They must consider acquisition system type and field of view in determining the width of a sector of fire. For example, while unaided vision has a wide field of view, its ability to detect and identify targets at range and in limited visibility conditions is restricted. Conversely, most fire control acquisitions systems have greater detection and identification ranges than the unaided eye, but their field of view is narrow. Means of designating sectors of fire include the following:

- TRPs.
- Clock direction.
- Terrain-based quadrants.
- Friendly based quadrants.

Direction of Fire

6-40. A direction of fire is an orientation or point used to assign responsibility for a particular area on the battlefield that must be covered by direct fire. Leaders designate directions of fire for the purpose of acquisition or engagement by subordinate elements, crew-served weapons, or individual Soldiers. Direction of fire is most commonly employed when assigning sectors of fire would be difficult or impossible because of limited time or insufficient reference points. Means of designating a direction of fire include the following:

- Closest TRP.
- Clock direction.
- Cardinal direction.
- Tracer on target.
- IR laser pointer.

Quadrants

6-41. Quadrants are subdivisions of an area created by superimposing an imaginary pair of perpendicular axes over the terrain to create four separate areas or sectors. Quadrants can be based on the terrain, on friendly forces, or on the enemy formation.

Note. The technique in which quadrants are based on the enemy formation is usually referred to as the target array; it is covered in the discussion of threat-based fire control measures.

6-42. The method of quadrant numbering is established in the unit SOP; however, care must be taken to avoid confusion when quadrants based on terrain, friendly forces, and the enemy formations are used simultaneously.

Terrain-Based Quadrant

6-43. A terrain-based quadrant uses a TRP, either existing or constructed, to designate the center point of the axes that divide the area into four quadrants. This technique can be employed in both offensive and defensive operations. In the offense, the commander designates the center of the quadrant using an existing feature or by creating a reference point (for example, using a ground-burst illumination round, a smoke marking round, or a fire ignited by incendiary or tracer rounds). The axes delineating the quadrants run parallel and

perpendicular to the direction of movement. In the defense, the commander designates the center of the quadrant using an existing or constructed TRP.

6-44. In the examples shown in figure 6-5, quadrants are marked using the letter "Q" and a number (Q1 to Q4); quadrant numbers are in the same relative positions as on military map sheets (from Q1 as the upper left-hand quadrant clockwise to Q4 as the lower left-hand quadrant).

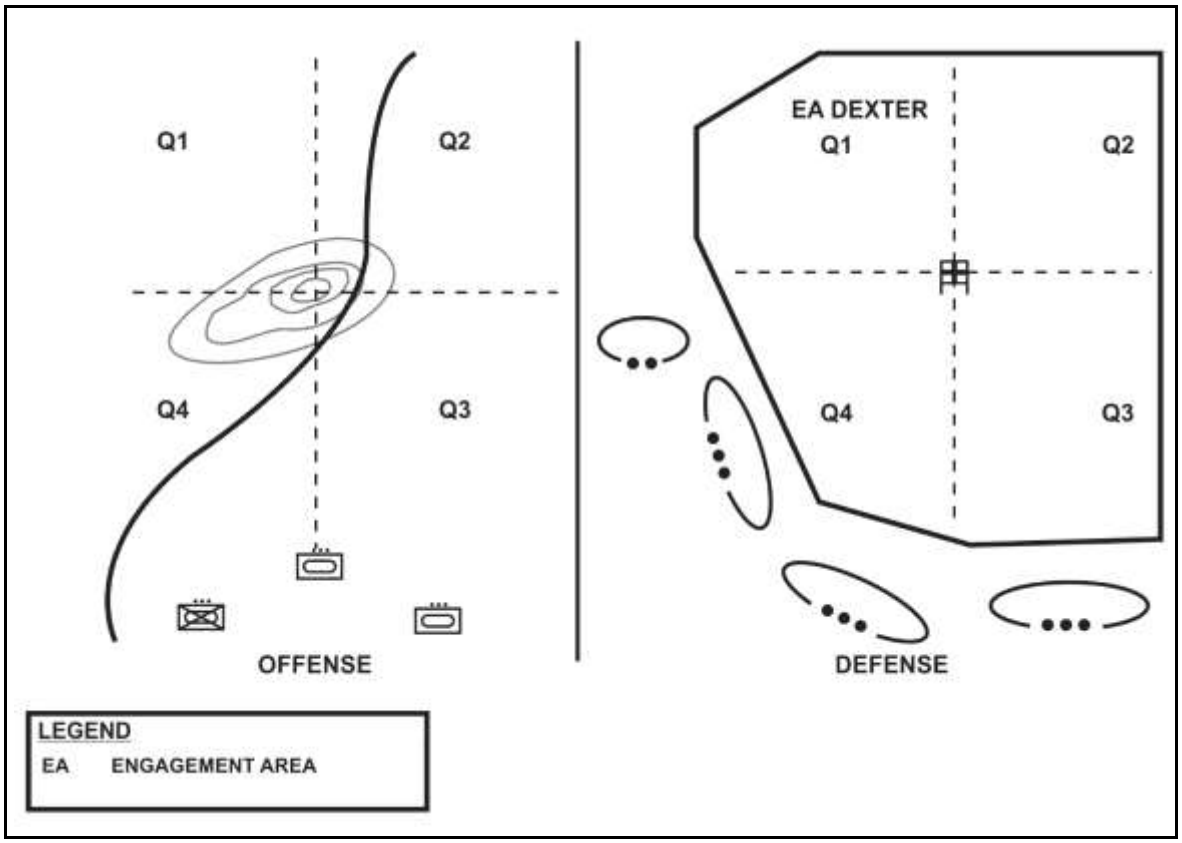


Figure 6-5. Examples of terrain-based quadrants

Friendly Based Quadrant

6-45. The friendly based quadrant technique entails superimposing quadrants over the unit's formation. The center point is based on the center of the formation, and the axes run parallel and perpendicular to the general direction of travel. For rapid orientation, the friendly quadrant technique may be better than the clock direction method; this is because different elements of a large formation are rarely oriented in the same exact direction and because the relative dispersion of friendly forces causes parallax to the target. (See figure 6-6.)

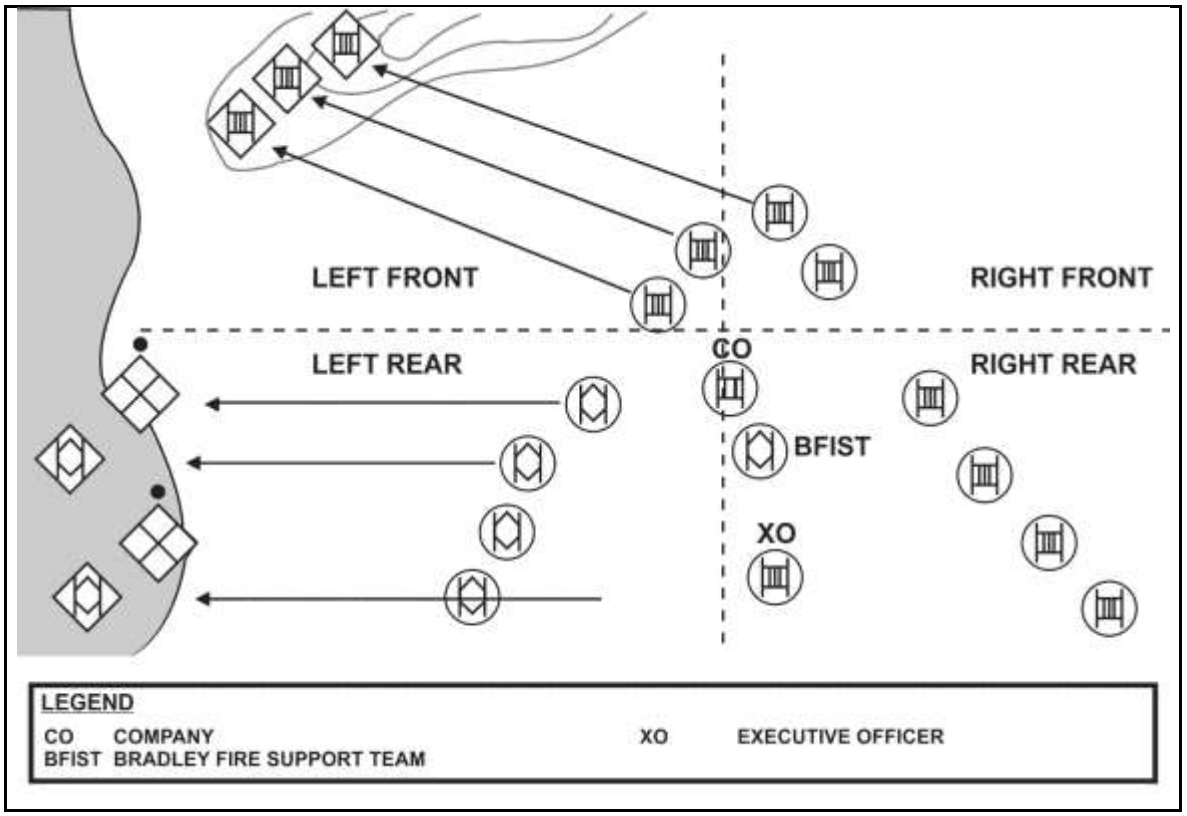


Figure 6-6. Example of friendly-based quadrants

Maximum Engagement Line

6-46. A maximum engagement line is the linear depiction of the farthest limit of effective fire for a weapon or unit. This line is determined by either the weapon's or unit's maximum effective range and by the effects of terrain. For example, slope, vegetation, structures, and other features provide cover and concealment that may prevent the weapon from engaging to the maximum effective range. A maximum engagement line serves several purposes. The commander can use it to prevent crews from engaging beyond the maximum effective range, to define criteria for the establishment of triggers, and to delineate the maximum extent of AO on the sector sketch.

Restrictive Fire Line

6-47. An RFL is a linear fire control measure beyond which engagement is prohibited without coordination. In the offense, the commander can designate an RFL to prevent a base of fire element from firing into the area where an assaulting element is maneuvering. This technique is particularly important when armored vehicles support the maneuver of Infantry squads. In the defense, the commander may establish an RFL to prevent the unit from engaging a friendly mechanized Infantry squad positioned in restricted terrain on the flank of an avenue of approach.

Final Protective Line

6-48. The final protective line is a line of fire established where an enemy assault is to be checked by the interlocking fires of all available weapons. The unit reinforces this line with protective obstacles and with FPF whenever possible. Initiation of the FPF is the signal for elements, crews, and individual Soldiers to shift fires to their assigned portion of the final protective line. They spare no ammunition in repelling the enemy assault, a particular concern for machine guns and other automatic weapons.

THREAT-BASED FIRE CONTROL MEASURES

6-49. The company commander uses threat-based fire control measures to focus and control fires by directing the unit to engage a specific enemy element rather than to fire on a point or area. The following paragraphs describe the tactics, techniques, and procedure's associated with this control measure.

Rules of Engagement

6-50. ROE specify the circumstances and limitations under which forces may engage; they include definitions of combatant and noncombatant elements and prescribe the treatment of noncombatants. Factors influencing ROE are national command policy, the mission and commander's intent, the OE, and the law of war. ROE always recognize a Soldier's right of self-defense; and clearly define other circumstances where force is authorized.

6-51. For example, during a cordon and search mission, the command may establish a WCS of, WEAPONS TIGHT, for the main gun. The commander does this because higher command directives explicitly restrict the use of the main gun as an explosive breach technique.

Weapons Ready Posture

6-52. Weapons ready posture is the selected ammunition and indexed range for individual and crew-served weapons in Infantry squads. It is a means by which leaders use their estimate of the situation to specify the ammunition and range for the most probable anticipated engagement. Ammunition selection depends on the target type, but the leader may adjust it based on engagement priorities, desired effects, and effective range. Range selection depends on the anticipated engagement range; it is affected by terrain intervisibility, weather, and light conditions. Within the company team, weapons ready posture affects the types and quantities of ammunition loaded in ready boxes, stowed in ready racks, and carried by mechanized Infantry squads. The following considerations apply:

- Tanks define weapons ready posture as the battle carry.
- Weapons ready posture covers the selected ammunition and the indexed range for BFVs.
- Examples of weapons ready posture are the following:
  - An M320 grenadier, who's most likely engagement is to cover dead space at 200 meters from his position, might load high-explosive dual purpose ammunition and set 200 meters on his quadrant sight.
  - To prepare for an engagement in a wooded area where engagement ranges are extremely short, an antiarmor specialist might dismount with an AT-4 instead of a Javelin.

Weapons Safety Posture

6-53. Weapons safety posture is an ammunition handling instruction that enables the commander to control the safety of his unit's weapons precisely. Leaders' supervision of the weapons safety posture, as well as Soldiers' adherence to it, minimizes the risk of accidental discharge and fratricide. (See table 6-2.) The postures are:

- AMMUNITION LOADED.
- AMMUNITION LOCKED.
- AMMUNITION PREPARED.
- WEAPONS CLEARED.

6-54. When setting and adjusting the weapons safety posture, the commander must weigh the desire to prevent accidental discharges against the requirement for immediate action based on the enemy threat. If the threat of direct contact is high, for example, the commander could establish the weapons safety posture as, AMMUNITION LOADED. If the requirement for action is less immediate, he might lower the posture to, AMMUNITION LOCKED, or, AMMUNITION PREPARED. Additionally, the commander can designate different weapons safety postures for different elements of the unit. For example, in the attack position, tanks and BFVs could switch to, AMMUNITION LOADED, while mechanized Infantry squads riding in BFVs remain at, AMMUNITION LOCKED.

Table 6-2. Weapons safety posture levels

Element Safety Posture	*Tank Weapons and Ammunition*	*BFV Weapons and Ammunition*	*Infantry Squad Weapons and Ammunition*
Ammunition Loaded	Main gun ammunition loaded. Machine gun ammunition on feed tray; bolt locked to rear. Smoke grenades in launchers. Weapons on electrical safe.	25-mm (millimeter) rounds cycled to bolt. Coax rounds on feed tray; bolt locked to rear. Tube-launched, optically tracked, wire-guided (TOW) missiles in launchers. Smoke grenades in launchers. Weapons on electrical safe.	Rifle rounds chambered. Machine gun and squad automatic weapon ammunition on feed tray; bolt locked to rear. Grenade launcher loaded. Weapons on manual safe.
Ammunition Locked	Main gun ammunition in ready rack. Machine gun ammunition on feed tray; bolt locked forward. Smoke grenades in launchers. Weapons on electrical safe.	25-mm rounds loaded into feeder, but not cycled to bolt. TOW missiles in launchers. Smoke grenades in launchers. Weapons on electrical safe.	Magazines locked into rifles. Machine gun and squad automatic weapon ammunition on feed tray; bolt locked forward. Grenade launcher unloaded.
Ammunition Prepared	Main gun ready rack filled. Machine gun ammunition boxes filled. Smoke grenades in launchers.	25-mm ready boxes filled. Coax ammunition boxes filled. TOW missiles in launchers. Smoke grenades in launchers.	Magazines, ammunition boxes, launcher grenades, and hand grenades prepared but stowed in pouches/vests.
Weapons Cleared	Main gun ready rack filled. Machine gun cleared, with bolts locked to the rear.	25-mm feeder removed; feeder and chamber cleared. Coax bolt group removed and chamber cleared.	Magazine, ammunition boxes, and launcher grenades removed; weapons cleared.

Weapons Control Status

6-55. The three levels of WCS outline the conditions, based on target identification criteria, under which friendly elements can engage. The commander sets and adjusts the WCS based on friendly and enemy disposition, and the clarity of the situation. Generally speaking, the higher the probability of fratricide, the more restrictive the WCS. The three levels, in descending order of restrictiveness, are—

- **WEAPONS HOLD.** Engage only if engaged or ordered to engage.
- **WEAPONS TIGHT.** Engage only targets that are positively identified as enemy.
- **WEAPONS FREE.** Engage any targets that are not positively identified as friendly.

6-56. As an example, the commander may establish the weapons control status as, WEAPONS HOLD, when friendly forces are conducting a passage of lines. By maintaining SU of his own elements and adjacent friendly forces, however, he may be able to lower the WCS. In such a case, the commander may be able to set a, WEAPONS FREE, status when he knows there are no friendly elements in the vicinity of the engagement. This permits his elements to engage targets at extended ranges even though it is difficult to distinguish targets accurately at ranges beyond 2000 meters under battlefield conditions. Another consideration is that the WCS is extremely important for forces using combat identification systems. Establishing the WCS as, WEAPONS FREE, permits leaders to engage an unknown target when they fail to get a friendly response.

Engagement Priorities

6-57. Engagement priorities, which entail the sequential ordering of targets to be engaged, can serve one or more of the following critical fire control functions:

- **Prioritize high-priority targets.** In concert with his concept of the operation, the commander determines which target types provide the greatest payoff; he can then set these as a unit engagement priority. For example, he may decide that destroying enemy engineer assets is the best way to prevent the enemy from breaching an obstacle.
- **Employ the best weapons for the target.** Establishing engagement priorities for specific friendly systems increases the effectiveness with which the unit employs its weapons. As an example, the engagement priority for the company team's tanks could be enemy tanks first, then enemy personnel carriers; this would decrease the chance that the team's lighter systems will have to engage enemy armored vehicles.
- **Distribute the unit's fires.** Establishing different priorities for similar friendly systems helps to prevent overkill and achieve effective distribution of fires. For example, the commander may designate the enemy's tanks as the initial priority for one BFV platoon, while making the enemy's personnel carriers the priority for another platoon. This would decrease the chances of units launching multiple TOWs against two enemy tanks, while ignoring the dangers posed by the personnel carriers.

Trigger

6-58. A trigger is a specific set of conditions that dictates initiation of fires. Often referred to as engagement criteria, a trigger specifies the circumstances in which subordinate elements should engage. The circumstances can be based on a friendly or enemy event. For example, the trigger for a friendly platoon to initiate engagement could be three or more enemy combat vehicles passing or crossing a given point or line. This line can be any natural or man-made linear feature, such as a road, ridge line, or stream. It may be a line perpendicular to the unit's orientation, delineated by one or more reference points.

Engagement Techniques

6-59. Engagement techniques are effects-oriented fire distribution measures. The following engagement techniques, the most common in company team operations, are covered in this discussion:

- Point fire.
- Area fire.
- Simultaneous.
- Alternating fire.
- Observed fire.
- Sequential fire.
- Time of suppression.
- Reconnaissance by fire.

Point Fire

6-60. Point fire entails concentrating the effects of a unit's fire against a specific, identified target such as a vehicle, machine gun bunker, or antitank guided missile position. When leaders direct point fire, all of the unit's weapons engage the target, firing until it is destroyed or the required time of suppression has expired. Employing converging fires from dispersed positions makes point fire more effective because the target is engaged from multiple directions. The unit may initiate an engagement using point fire against the most dangerous threat, and then revert to area fire against other, less threatening point targets.

Note. Use of point fire is fairly rare because a unit seldom encounters a single, clearly identified enemy weapon.

Area Fire

6-61. Area fire involves distributing the effects of a unit's fire over an area in which enemy positions are numerous or are not obvious. If the area is large, leaders assign sectors of fire to subordinate elements using a terrain-based distribution method such as the quadrant technique. Typically, the primary purpose of the area fire is suppression; however, sustaining effective suppression requires judicious control of the rate of fire.

Simultaneous Fire

6-62. Units employ simultaneous fire to rapidly mass the effects of their fires or to gain fire superiority. For example, a unit may initiate a support by fire operation with simultaneous fire, then revert to alternating or sequential fire to maintain suppression. Simultaneous fire is employed to negate the low probability of the hit and kill of certain anti-armor weapons. As an example, a mechanized Infantry platoon may employ simultaneous fire with its weapons systems to ensure rapid destruction of the enemy section that is engaging a friendly position.

Alternating Fire

6-63. In alternating fire, pairs of elements continuously engage the same point or area target one at a time. For example, a company team may alternate fires of two platoons; a tank platoon may alternate the fires of its sections; or a mechanized Infantry platoon may alternate the fires of a pair of machine guns. Alternating fire permits the unit to maintain suppression for a longer duration than does volley fire; it forces the enemy to acquire and engage alternating points of fire.

Observed Fire

6-64. Observed fire is usually used when the company team is in protected positions with engagement ranges in excess of 2500 meters. It can be employed between elements of the company team, such as the tank platoon lasing and observing while the BFV platoon fires, or between sections of a platoon. The commander or platoon leader directs one element or section to engage. The remaining elements or sections observe fires and prepare to engage on order in case the engaging element consistently misses its targets, experiences a malfunction, or runs low on ammunition. Observed fire allows for mutual observation and assistance while protecting the location of the observing elements.

Sequential Fire

6-65. Sequential fire entails the subordinate elements of a unit engaging the same point or area target one after another in an arranged sequence. For example, a mechanized Infantry platoon may sequence the fires of its four BFVs to gain maximum time of suppression. Sequential fire can help to prevent the waste of ammunition, as when a rifle platoon waits to see the effects of the first Javelin before firing another.

Reconnaissance by Fire

6-66. *Reconnaissance by fire* is a technique in which a unit fires on a suspected enemy position to cause the enemy forces to disclose their presence by movement or return fire (FM 3-90-2). This response permits the commander and subordinate leaders to make target acquisition and then to mass fires against the enemy element. Typically, the commander directs a subordinate element to conduct the reconnaissance by fire. For example, he may direct an overwatching platoon to conduct the reconnaissance by fire against a probable enemy position before initiating movement by a bounding element.

Fire Patterns

6-67. Fire patterns are a threat-based measure designed to distribute the fires of a unit simultaneously among multiple, similar targets. Platoons use them most often to distribute fires across an enemy formation. Leaders designate and adjust fire patterns based on terrain and the anticipated enemy formation. (See figure 6-7.) The fire patterns are as follows:

- Frontal.
- Cross.
- Depth.

Frontal Fire

6-68. Leaders may initiate frontal fire when targets are arrayed in front of the unit in a lateral configuration. Weapons systems engage targets to their respective fronts. For example, the left flank weapon engages the left-most target; the right flank weapon engages the right-most target. As weapons systems destroy targets, weapons shift fires toward the center of the enemy formation from near to far.

Cross Fire

6-69. Leaders initiate cross fire when targets are arrayed laterally across the unit's front in a manner that permits diagonal fires at the enemy's flank, or when obstructions prevent unit weapons from firing frontally. Right flank weapons engage the left-most targets; left flank weapons engage the right-most targets. Firing diagonally across an EA provides more flank shots, thus increasing the chance of kills; it reduces the possibility of the enemy detecting friendly elements should the enemy continue to move forward. As friendly elements destroy targets, weapons shift fires toward the center of the enemy formation.

Depth Fire

6-70. Leaders initiate depth fire when enemy targets disperse in depth, perpendicular to the unit. Center weapons engage the closest targets; flank weapons engage deeper targets. As the unit destroys targets, weapons shift fires toward the center of the enemy formation.

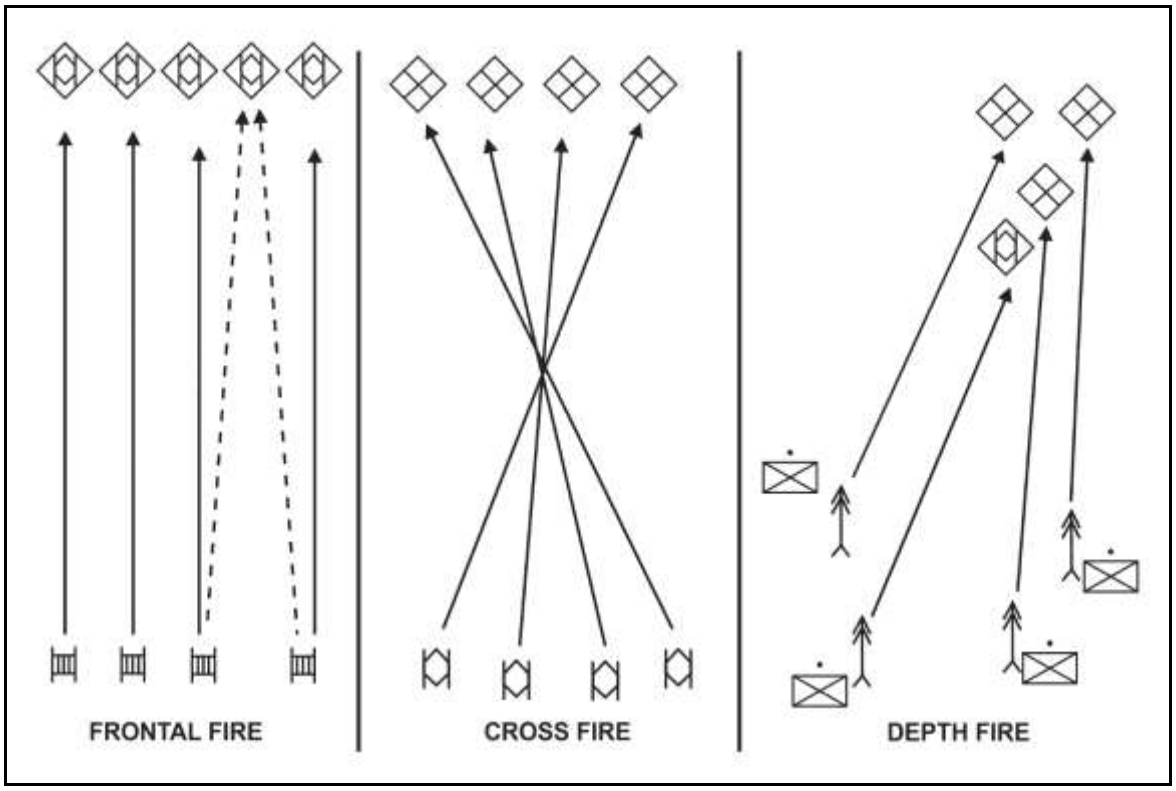


Figure 6-7. Examples of fire patterns

Target Array

6-71. Target array enables the commander to distribute fires when the enemy force is concentrated and terrain-based controls are inadequate. Forces create this threat-based distribution measure by superimposing a quadrant pattern on the enemy formation. Soldiers center the pattern the enemy formation, with the axes running parallel and perpendicular to the enemy's direction of travel. The target array fire control measure is effective against an enemy with a well-structured organization and standardized doctrine. However, it may prove less effective against an enemy that presents few organized formations or does not follow strict prescribed tactics. Leaders describe quadrants using the quadrants' relative locations. (See figure 6-8.)

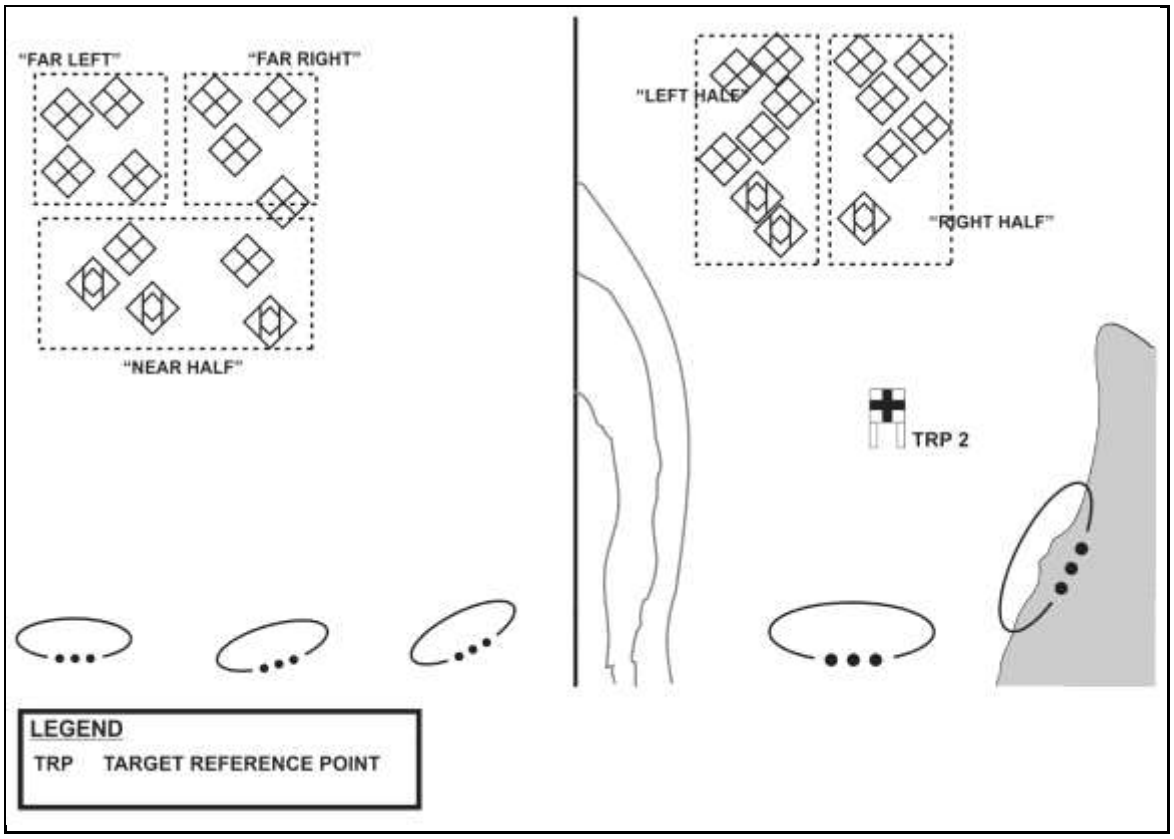


Figure 6-8. Examples of target array

COMPANY FIRE COMMANDS

6-72. Fire commands are oral orders issued by commanders and leaders to focus and distribute fires as required to achieve decisive effects against the enemy. They allow leaders to rapidly and concisely articulate their firing instructions using a standard format. Unit fire commands include these elements, which are discussed in the following paragraphs:

- Alert.
- Weapon or ammunition (optional).
- Target description.
- Orientation.
- Range (optional).
- Control (optional).
- Execution.

ALERT

6-73. The alert specifies the elements that are directed to fire. It does not require the leader initiating the command to identify him. Examples of the alert element (call signs and code words based on unit SOP) include the following:

- GUIDONS (could indicate all subordinate elements).
- RED (could indicate first platoon only).

WEAPON OR AMMUNITION (OPTIONAL)

6-74. This element identifies the weapon and ammunition to be employed by the alerted elements. Leaders may designate the type and number of rounds to limit expenditure of ammunition. Examples of this element include the following:

- TOW.
- TWO ROUNDS SABOT.

DESCRIPTION (TARGET DESCRIPTION)

6-75. Target description designates which enemy elements are to be engaged. Leaders may use the description to focus fires or achieve distribution. Examples of target description include the following:

- THREE PCs.
- THREE TANKS AND 10 PCs.
- TROOPS IN TRENCH.

DIRECTION OR ELEVATION

6-76. This element identifies the location of the target. The leader may use direction or elevation terms to assist the firer acquiring the correct target. This element may include ELEVATION to better direct the firer onto the desired target. ELEVATION is useful to leaders when describing target location in urban environments and restricted terrain. There are numerous ways to designate the location of target, including the following:

- **Closest TRP.** Example: TRP 13.
- **Clock direction.** Example: ONE O'CLOCK.
- **Terrain quadrant.** Example: QUADRANT ONE.
- **Friendly quadrant.** Example: LEFT FRONT.
- **Target array.** Example: FRONT HALF.
- **Tracer on target.** Example: ON MY TRACER.
- Laser pointer. Example: ON MY POINTER.

RANGE (OPTIONAL)

6-77. The range element identifies the distance to the target. Announcing range is not necessary for systems that are range finder-equipped or that employ command-guided or self-guided munitions. For systems that require manual range settings, leaders have a variety of means for determining range, including the following:

- Predetermined ranges to TRPs or PLs.
- An M1A1/M1A2 tank crew announcing the range for an M2A2-equipped platoon.
- Hand-held range finders.
- Range stadia.
- Mil reticle.

METHOD

6-78. The method element of a fire command, describes to the firer the way or method the target(s) are engaged. Leaders use this element when presented with multiple targets to identify which target to engage first. For collective fire commands, this can also indicate the fire pattern used to engage the threats. Multiple methods may be used in one fire command, including the following:

- Red engage armor, White engage personnel carrier, Blue observe fires.
- Armor targets first.

CONTROLS

6-79. The controls element, provides the leader the ability to manage ammunition, friendly exposure to the threat, reinforce the rules of engagement, or provide conditions that are met before engaging the threat. Multiple controls may be used within the fire command, as necessary. Controls in a collective fire command

can delegate the authority to give the command of execution to an authorized subordinate leader. Example of a control follows:

- Engage upon crossing phase line Denver.
- Wait for rounds complete on AB6900.

EXECUTION

6-80. The execution element specifies when fires will be initiated. The commander may wish to engage immediately, delay initiation, or delegate authority to engage. Examples of this element include the following:

- FIRE.
- AT MY COMMAND.
- AT YOUR COMMAND.
- AT PHASE LINE ORANGE.

TERMINATION

6-81. Termination is the last element of the fire command. It informs the Soldiers to stop firing all weapons and systems in their control. **All fire commands are terminated**. This command may be given by any Soldier or crewmember for any reason, typically safety. The leader that issued the fire command **is required to terminate the fire command** at the completion of every engagement, regardless if another Soldier or crewmember announced it. All fire commands, regardless of type or who issued them, are terminated by the announcement of, CEASE FIRE

Chapter 7
Augmenting Combat Power

For a unit to achieve its full combat potential, the commander must integrate all available assets effectively. This chapter focuses on those elements with which the company team is most likely to work: fires, aviation, protection, and intelligence.

SECTION I – INTELLIGENCE CAPABILITIES

7-1. The goal of intelligence at the company level is to paint a picture of attitudes and intentions; to predict how the enemy will operate in relation to the population and terrain based on his previous actions. This picture should be a composite of all available information including, most importantly, the knowledge contained within the company. (Refer to ADRP 2-0 for more information.)

COMPANY INTELLIGENCE SUPPORT TEAM

7-2. As discussed in Chapter 1, the COIST is a team formed at the company level to perform intelligence tasks as directed by the commander. The establishment of an intelligence team at the company level provides meaningful, actionable intelligence to the company leadership.

INTELLIGENCE OPERATIONS

7-3. *Intelligence operations* are the tasks undertaken by military intelligence units and Soldiers to obtain information to satisfy validated requirements (ADRP 2-0). These requirements are normally specified in the information collection plan. Intelligence operations collect information about the intent, activities, and capabilities of threats and relevant aspects of the OE to support commanders' decision making. Data and information collected during the course of intelligence operations is essential to the development of timely, relevant, accurate, predictive, and tailored intelligence products.

7-4. Intelligence operations are conducted using mission orders and standard command and support relationships. Intelligence operations are shaping operations used by the commander for decisive action. Flexibility and adaptability to changing situations are critical for conducting effective intelligence operations.

INTELLIGENCE ANALYSIS

7-5. Analysis is the basis for planning and staff activities. Analysis facilitates commanders' and other decision makers' ability to visualize the operational environment, organize their forces, and control operations to achieve their objectives. *Intelligence analysis* is the process by which collected information is evaluated and integrated with existing information to facilitate intelligence production (ADRP 2-0).

7-6. Intelligence analysis describes—and attempts to proactively assess—the current threats, terrain and weather, and civil considerations. The development of information collection requirements sets the stage for intelligence analysis. This analysis supports the development of focused information collection requirements. Intelligence analysis is continuous, complements intelligence synchronization, and enables operations.

7-7. Pattern analysis is the process of deducing the doctrine and TTPs that threat forces prefer to employ by carefully observing and evaluating patterns in their activities. This technique is based on the premise that threat COAs reflects certain characteristic patterns that can be identified and interpreted. Pattern analysis can be critical when facing a threat whose doctrine is adaptable, undeveloped, or unknown; thus, everyone must create his own threat model and threat templates.

INTELLIGENCE DISCIPLINES

7-8. The Army intelligence enterprise is commonly organized through the intelligence disciplines. Intelligence disciplines are categories of intelligence functions. Each discipline applies unique aspects of support and guidance called technical channels.

7-9. Units must consider the seven intelligence disciples and apply them as appropriate. The seven intelligence disciplines are as follows:

- Open-source intelligence (OSINT).
- Human intelligence (HUMINT).
- Geospatial intelligence (GEOINT).
- Signals intelligence (SIGINT).
- Measurement and signatures intelligence.
- Technical intelligence.
- Counterintelligence.

Open-Source Intelligence

7-10. OSINT pertains to intelligence produced from publicly available information that is collected, exploited, and disseminated in a timely manner to an appropriate audience for to address a specific intelligence requirement. OSINT is derived from the systematic collection, processing, and analysis of publicly available, relevant information in response to intelligence requirements. Two important related terms are open source and publicly available information. They are defined in the following ways:

- Open source is any person or group that provides information without the expectation of privacy—the information, the relationship, or both is not protected against public disclosure.
- Publicly available information is data, facts, instructions, or other material published or broadcast for general public consumption; available on request to a member of the general public; lawfully seen or heard by any casual observer, or made available at a meeting open to the general public. OSINT pertains to intelligence produced from publicly available information that is collected.

Human Intelligence

7-11. *Human intelligence* is the collection by a trained human intelligence collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities (ADRP 2-0). A HUMINT collector is a person who is trained and authorized to collect information from individuals (HUMINT sources) for the purpose of answering requirements. HUMINT collectors are the only personnel authorized to conduct HUMINT collection operations.

7-12. A HUMINT source is a person from whom information is collected for the purpose of producing intelligence. HUMINT sources can include friendly, neutral, or hostile personnel. The source may either possess first- or second-hand knowledge normally obtained through sight or hearing. Categories of HUMINT sources include but are not limited to detainees, refugees, displaced persons, local inhabitants, friendly forces, and members of foreign governmental and NGOs. (Refer to FM 2-22.3 for more information.)

Geospatial Intelligence

7-13. *Geospatial intelligence* is the exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information (JP 2-03).

7-14. GEOINT activities necessary to support operations include the capability to define GEOINT requirements, discover and obtain GEOINT; put GEOINT in a useable form; and then maintain, use, and share GEOINT. The GEOINT cell interfaces directly with the user to define user requirements. Then it interfaces with the National System for Geospatial Intelligence to obtain and provide the best quality GEOINT possible directly to the Soldier. (Refer to, see ADRP 2-0 for more information on GEOINT.)

Signals Intelligence

7-15. SIGINT provides unique intelligence information, complements intelligence derived from other sources, and is often used for cueing other sensors to potential targets of interest. For example, SIGINT, which identifies activity of interest, may be used to cue GEOINT to confirm that activity. Conversely, changes detected by GEOINT can cue SIGINT collection against new targets.

Measurement and Signature Intelligence

7-16. Measurement and signatures intelligence collection systems include but are not limited to radar, spectroradiometric, electro-optical, acoustic, radio frequency, nuclear detection, and seismic sensors, as well as techniques for collecting chemical, biological, radiological, nuclear, and high-yield explosives signatures and other materiel samples.

7-17. Geophysical measurement and signatures intelligence involves phenomena transmitted through the earth (ground, water, and atmosphere) and man-made structures including emitted or reflected sounds, pressure waves, vibrations, and magnetic field or ionosphere disturbances. Unattended ground sensors are an example of the following geophysical sensors:

- **Seismic.** The passive collection and measurement of seismic waves or vibrations in the earth's surface.
- **Acoustic.** The collection of passive or active emitted or reflected sounds, pressure waves, or vibrations in the atmosphere or in the water. Water-based systems detect, identify, and track ships and submersibles operating in the ocean.
- **Magnetic.** The collection of detectable magnetic field anomalies in the earth's magnetic field (land and sea). Magnetic sensors have the capability to indicate the presence and direction of travel of an object containing iron.

Technical Intelligence

7-18. *Technical intelligence* is intelligence derived from the collection, processing, analysis, and exploitation of data and information about foreign equipment and materiel for the purposes of preventing technological surprise, assessing foreign scientific and technical capabilities, and developing countermeasures designed to neutralize an adversary's technological advantages (JP 2-0). The role of technical intelligence is to ensure Soldiers understand the threat's full technological capabilities. With this understanding, U.S. forces can adopt appropriate countermeasures, operations, and tactics, techniques, and procedures. (Refer to ATP 2-22.4 for more information on technical intelligence.)

Counterintelligence

7-19. CI counters or neutralizes intelligence collection efforts through collection, counterintelligence investigations, operations, analysis, production, and technical services and support. Counterintelligence includes all actions taken to detect, identify, track, exploit, and neutralize multidiscipline intelligence activities of foreign intelligence and security services, international terrorist organizations, and adversaries, and is the key intelligence community contributor to protect U.S. interests and equities. (Refer to ATP 2-22.21 for more information.)

ALL-SOURCE INTELLIGENCE

7-20. *All-source intelligence* is the integration of intelligence and information from all relevant sources in order to analyze situations or conditions that impact operations (ADRP 2-0). All-source intelligence is used to develop the intelligence products necessary to aid situational understanding, support the development of plans and orders, and answer information requirements. Although all-source intelligence normally takes longer to produce, it is more reliable and less susceptible to deception than single-source intelligence.

7-21. All-source intelligence production is continuous and occurs throughout the intelligence and operations processes. Most of the products resulting from all-source intelligence are initially developed during planning and updated as needed throughout preparation and execution based on information gained from continuous assessment.

LANGUAGE SUPPORT

7-22. Military operations are highly dependent on military- and contractor-provided foreign language support. The requirement to communicate with and serve on multinational staffs, communicate with local populations, and exploit enemy forces necessitates the use of linguists. The growing focus on multinational operations increases the competition for limited linguist resources that are vital for mission success.

7-23. Commanders must consider linguist requirements for every contingency plan and operations plan assigned to their commands. Prior staff planning and identification of linguist requirements should prompt commanders to initiate linguist support requests and identify command relationships before actual operations.

7-24. If the mission analysis reveals requirements for linguistic support, the commander must identify what foreign languages are needed, the foreign language proficiency levels needed for each assignment, and the best source of linguists. If the mission includes intelligence and information collection, the commander must identify military intelligence collection skills required.

SECTION II – FIRES

7-25. Army fires systems deliver fires in support of decisive actions to create specific lethal and nonlethal effects on a target. Lethal fire support assets include mortars, field artillery cannons and rockets, CAS or CCA, and naval gunfire. Nonlethal fire support attack systems include obscuration or illumination munitions, as well as EW assets. (Refer to FM 3-90.5 for more information.)

FIRE SUPPORT TEAM

7-26. Chapter 1 discussed briefly the organization, duties, and responsibilities of company team FIST personnel. This section examines in more detail the equipment, capabilities, procedures, and other considerations that affect the company team FIST and its employment in the accomplishment of fire support tasks.

EQUIPMENT

7-27. The FIST operates out of a specially modified fire support vehicle; the BFSV. Each vehicle is equipped with digital and voice communications links to all available indirect fire support assets.

COMMUNICATIONS

7-28. The FIST has the capability to transmit on and monitor these five networks—

- **BCT fires battalion fire direction net (digital).** The FIST uses this net to digitally send calls for fire.
- **Company team command network (voice).** This network enables the FIST to monitor company team operations, and links it to the commander and PLs for planning and coordination.
- **FBCB2.** This enables the FIST to have a common operational picture with the company team, the CAB fires cell, and other FISTs.
- **CAB fire support network (voice).** The FIST communicates with the CAB fires cell on this network, for which the fires cell is the net control station.
- **Mortar platoon fire direction network (digital).** As needed, the FIST sends fire missions to the supporting mortar platoon or section using this network.

FIRE SUPPORT TEAM EMPLOYMENT

7-29. The company team FSO operates out of the BFSV in a location where he can observe and control execution of the fire support plan most effectively. The FSO establishes OPs that take maximum advantage of the capability of the Lightweight Laser Designator/Rangefinder system and Laser Designator Module to execute accurate fires. He communicates with the commander on the company team command net. This option allows the FSO to maintain effective control of his Fos and to conduct required fires coordination. He must keep the company team informed at all times of his location and of the routes he plans to take when moving from observation post to observation post.

7-30. A FIST is provided to the company to assist in the plan and coordinate all supporting fires available to the unit, including mortars, field artillery, naval surface fire support, and close air support integration. FISTs employed to provide fire support coordination, targeting, input for terminal attack control, and assessment capabilities.

JOINT FIRES OBSERVER

7-31. A joint fires observer (JFO) is a trained and certified Servicemember who can request, adjust, and control surface-to-surface fires, provide targeting information in support of Type 2 and 3 close air support terminal attack controls, and perform autonomous terminal guidance operations The JFO is not an additional Soldier in the fire support organization, but rather an individual who has received the necessary training and certification. Trained JFOs, in conjunction with JTACs, will assist commanders with the timely planning, synchronization, and responsive execution of all joint fires. (Refer to ADRP 3-09 for more information on JFO's.)

FIRE PLANNING

7-32. The commander's ability to orchestrate and employ all available fires related resources as a system and to integrate and synchronize fires with his concept of operations results from an established process known as fires planning. Leaders conduct fires planning concurrently with maneuver planning at all levels. Brigade combat teams and CABs typically use top-down fire support planning, with bottom-up refinement of the plans. The objective of fires planning is to optimize combat power. It is performed as part of the operations process. It requires continually coordinating plans and managing the fires assets that are available to a supported force. (Refer to ATP 3-09.30 for more information.)

7-33. The company commander further refines his guidance for fires in his commander's intent and concept of operations. A clearly defined concept of operations enables the company commander to articulate precisely how he wants indirect fires to affect the enemy during the different phases of the operation. In turn, this allows the FSO to develop a fire support plan that supports accomplishment of the company team's mission. To develop an effective fire support plan, the company team FSO must understand the fires planning process and address all the essential elements of a fires plan.

FIRES TASKS

7-34. Fires tasks are linked to the maneuver task or tasks and describe the types of fires and targeting objectives or desired effects against enemy formations or functions. There may be more multiple fires tasks per phase of the operation. For example, during the assault on object chiefs, field artillery provides suppressive fires against enemy direct fire systems; and mortars provide obscuration fires to disrupt enemy observation during breaching operations.

Types of Missions, Effects, and Munitions

7-35. Types of missions, effects, and munitions identify the fires assets required to achieve the desired effects. The types of fires include, but are not limited to—

- Air interdiction; CAS, or CCA.
- Preparation; barrage.
- Counter-preparation; destruction.
- Fire strike; harassing.
- Illumination; neutralization.
- Obscuration; screening.
- Registration; strike.
- Suppression; suppression of enemy air defense.
- Special munitions such as, Excalibur, family of scatterable mines (FASCAM), smoke, Guided Multiple Launch Rocket System.

Targets

7-36. Desired effects describe the lethal and nonlethal effects fires (including EW systems) must achieve against a specific enemy formation or function. "Formation" refers to a specific element, vehicle type, or target category. "Function" is the capability required to perform a task or fulfill a purpose. The FSO can use numerous terms to describe targeting objectives, with the most common being deceive, degrade, delay, deny, destroy, disrupt, divert, exploit, interdict, influence, neutralize, and suppress.

Effects

7-37. An effect is—

- The physical or behavioral state of a system that results from an action, a set of actions, or another effect.
- The result, outcome, or consequence of an action.
- A change to a condition, behavior, or degree of freedom as the result, outcome, or consequence of an action.

7-38. Army and Joint doctrine describe effects in the following ways:

- **Direct.** A direct effect is the proximate, first-order consequence of an action, such as the destruction of a target by precision guided munitions. Direct effects are immediate and easily recognizable.
- **Indirect.** An indirect effect is a delayed or displaced consequence associated with the action that caused the direct effect. Indirect effects often are less observable or recognizable than direct effects, particularly when they involve changes in an adversary's behavior. However, an indirect effect may be the one desired.

Allocation

7-39. Decisions on allocations of fires are based on the main effort, the task of each unit, and the expected enemy capabilities. All fires assets must be addressed to include target acquisition. Allocation may be expressed as specific targets, numbers of targets/zones for planning purposes, or as assets available (for example, 1x Field Artillery platoon DS to Alpha Co.). Priority of fires is addressed for planned activities, but can change based on a change to the enemy COA, completion of events, or planned branches and sequels.

Positioning Guidance

7-40. Positioning guidance provides instructions for the movement of fires assets and observer positioning to support the scheme of maneuver. Positioning guidance should highlight any specific changes to the unit basic load, if necessary for special missions. The positioning guidance should address the controlled supply rate, particularly if it impacts successful mission accomplishment.

7-41. An example of positioning guidance is as follows: Mortar platoon vice not later than H+20 in order to support 1st platoon breach vice objective (OBJ) chiefs. Ensure 40 min x 400 of smoke on hand. The 2d platoon establishes OP1 vice 7081 with laser designating capability. Controlled supply rate limited to 10 high explosive/5 Smoke/3 Illumination.

Attack Guidance

7-42. Attack guidance describes which delivery systems are to be used to attack specific target types and the criteria that must be met before processing the target. Initial attack guidance is usually provided from higher headquarters order, and should be modified as necessary based on mission analysis and COA development. Attack guidance is usually articulated in a matrix format. Attack guidance may be included in the following products:

- High-priority target list.
- Target selection standards.
- Attack guidance matrix.

Restrictions

7-43. Restrictions describe constraints in terms of requirements to do something or prohibiting an action. Some considerations include restrictions on ammunition expenditures, types of fires, areas of employment, creation of obstacles, limiting risk to friendly troops, minimizing the loss of civilian life, and permissive and restrictive fire support control measures.

7-44. An example of restrictions is: No cratering munitions on Highway 322. No occupation or use of incendiary munitions in built-up areas. Critical fire line phase line BLUE, on order phase line RED. No-fire area 1-2 in effect.

Coordinating Instructions

7-45. Coordinating instructions pertain to the unit as a whole. They may include special instructions on ROE, fires communications, target responsibility, fire support task responsibility, sustainment, administrative information, locations of CPs, ammunition supply points, and ammunition transfer holding points. Coordinating instructions are usually included as part of the fire support execution matrix or in paragraph 3 (execution), subparagraph C (coordinating instructions).

Assessment

7-46. Assessment is the continuous monitoring and evaluation of the current situation and progress of the operation. It involves deliberately comparing forecasted outcomes to actual events to determine the overall effectiveness of force employment. Assessment allows the company commander to maintain accurate situational understanding, and to revise his visualization which in turn helps the commander make timely and accurate decisions. Assessment of effects is determining how effective friendly actions have been against the enemy. Effects are typically measured by two criteria: measure of performance and measure of effectiveness.

CLEARANCE OF FIRES

7-47. The commander is the final authority to approve (clear) fires and their effects within his AO. Although the commander may delegate authority to coordinate and clear fires to his fire support officer, the ultimate responsibility belongs to the commander. Usually, the FSO assists the commander by making recommendations on the clearance of fires. Units equipped with FBCB2 can request fires digitally by highlighting the call for fire box on the FBCB2 size, activity, location, and time report tab or using a traditional call-for-fire format. Once the FSO receives this request via FBCB2, he must still clear the request through the company commander. If the company commander approves the request, the FSO then forwards the request through the fire support channels via frequency modulation or through the Advanced Field Artillery Tactical Data System.

SCREENING AND OBSCURATION FIRES

7-48. There are three types of fires to achieve effects: hexachloroethane-zinc smoke, white phosphorus smoke, and improved white phosphorus smoke. The difference between white phosphorus and improved white phosphorus in the improved burns hotter and longer. Since weather conditions can affect obscuration, the company FSO must be sure to coordinate not only with the maneuver commander, but with adjacent units that could be affected.

7-49. Screening and obscuration fires decrease the level of energy available for the functions of seekers, trackers, and vision enhancement devices. Screening fires are delivered in areas between friendly and an opponent's forces or in friendly Aos to degrade opponent ground and aerial detection, observation, and engagement capabilities. Obscurations munitions and projectiles may be placed on or near threat or enemy positions to minimize an opponent's observation both within and beyond the position area. (Refer to ATP 3-09.30 for more information.)

SCREENING

7-50. Screening fires involve the use of hexachloroethane-zinc smoke, white phosphorus, or a combination of these munitions to mask friendly elements and conceal their operations from the enemy. Screening fires can be used as follows:

- Slow enemy vehicles to blackout speed.

- Obscure the vision of direct fire gunners.
- Reduce the accuracy of enemy observed fires by obscuring OPs.
- Cause confusion and apprehension among enemy soldiers.
- Limit the effectiveness of enemy visual command and control signals.

7-51. Three additional special missions are illumination, field-artillery-delivered FASCAM, and precision munitions.

- **Illumination.** The commander may require artillery or mortar-delivered illumination rounds despite the increase in the number of image intensification and IR sights. Illumination provides the ground force commander with the ability to see the battlefield at night without using his image intensification and infrared night sight, resulting in a savings to those systems' batteries.
- **Field-artillery-delivered FASCAM.** The commander may direct the field artillery fire FASCAM to delay or disrupt enemy formations or to close gaps in the defensive obstacle belts. Field artillery delivered FASCAM consists of two different types of munitions: remote antiarmor mines system and area denial artillery munitions. Use of remote antiarmor mines system or area denial artillery munitions requires coordination between the maneuver commander, the fire support officer, and the engineer.
- **Precision munitions.** The commander may employ precision munitions during decisive operations to engage high pay off and high value targets. Precision munitions can also be used to engage targets in urban and complex terrain to reduce or mitigate collateral damage.

FIELD ARTILLERY

7-52. Field artillery is the maneuver commander's principal means for providing indirect fire support to his maneuver forces. Field artillery can neutralize, suppress, or destroy enemy direct fire forces; attack enemy artillery and mortars; provide battlefield obscuration, and deliver FASCAM to isolate and interdict enemy forces, or to protect friendly operations. Fire cells within maneuver organizations serve as the integrating center for all elements of fire support. Field artillery delivery systems include cannons, rockets, and missiles. These systems can provide fires under all conditions of weather and in all types of terrain. They can shift and mass fires rapidly without having to displace.

7-53. Within the ABCT, the fires battalion has two batteries of 155-mm artillery (Paladin). Each battery has two four-gun platoons, which can be used for FPFs, smoke, and illumination. The headquarters and headquarters battery is equipped with both Q36 and Q37 counterfire radars and four lightweight counter-mortar radars.

MORTARS

7-54. Mortars are organic to all CABs. The mission of mortars is to provide immediate and close supporting fires to the maneuver forces in contact. Maneuver unit mortars provide close, immediately responsive fires for committed companies. These fires harass, suppress, neutralize, and destroy enemy attack formations and defenses; obscure the enemy's vision; and inhibit the enemy's ability to maneuver. Mortars can be used for FPFs, smoke, and illumination.

7-55. The CAB commander decides how and when to integrate mortars, as a key fire support asset, into his battle plan. However, since they are fires assets, the FSO should give advice and make recommendations to the commander. The amount of control the FSO has over the employment of available mortars is a matter for the supported unit commander to decide. The commander may specify mortar support for subordinate units by changing the command relationship, assigning priority of fires, or assigning priority targets.

7-56. The CAB mortar platoon consists of a platoon headquarters, a single fire direction chief, and four mortar squads, each with one 120-mm M121 mortar. The M121 mortar is capable of firing 16 rounds per minute for the first minute with a sustained rate of fire of four rounds per minute after the first minute. It is capable of firing high explosive, illumination, and smoke rounds.

7-57. The mortar platoon can provide the company commander with the following:

- Supporting fire that is responsive to the company fight.

- Organic fires that complement, but do not replace, the fires of supporting field artillery, CAS or CCA, and naval gunfire.
- A solid base of fire upon which to anchor his maneuver against the critical point of enemy weakness.
- The ability to inhibit enemy fire and movement while allowing friendly forces to gain a tactical mobility advantage.

SECTION III – PROTECTION

7-58. Military operations are inherently complex. Commanders must deliberately plan and integrate the application of military force against an enemy while protecting the force and preserving combat power. The OE requires a capability-based approach to mission accomplishment. Operational and functional concepts are translated through the warfighting functions into tasks and systems for the development of plans, orders and, ultimately, unit missions. Commanders develop protection strategies for each phase of an operation or major activity. They integrate and synchronize protection tasks and systems to reduce risk, mitigate identified vulnerabilities, and act on opportunity. When properly integrated and synchronized, the tasks and systems that comprise the protection warfighting function effectively protect the force, enhance the preservation of combat power, and increase the probability of mission success.

7-59. Units must consider the 14 protection tasks and systems that that are in ADRP 3-37. This section discusses the seven protection tasks and systems that are commonly executed by a company team. They are—

- Employ safety techniques, including fratricide avoidance.
- Implement operations security (OPSEC).
- Conduct survivability operation.
- Provide force health protection.
- Conduct chemical, biological, radiological, nuclear, and high-yield explosives operations.
- Provide explosive ordnance disposal and protection support.
- Coordinate air and missile defense.
- Conduct personnel recovery.

EMPLOY SAFETY TECHNIQUES, INCLUDING FRATRICIDE AVOIDANCE

7-60. Operational conditions often impose significant hazards to Soldiers through the increased probability of an accidental event. In an extreme OE, these hazards raise the risk level as equipment and personnel are taxed. Leaders must know their Soldiers and trained crews, and operators must know the capabilities and limitations of their platforms and systems. To maintain a continuous operational tempo, commanders must know how to employ and sustain personnel and equipment. When planning operations, commanders—

- Consider human endurance limits and environmental conditions.
- Balance the possible benefits of sustained, high-tempo operations with the level of risk.
- Accept no unnecessary risks.
- Conduct high-risk operations only when the potential gain or benefit outweighs the potential loss.

7-61. Integrating safety into the operations process through the protection warfighting function and the risk management process provides an opportunity to identify and assess hazards to the force and develop risk reduction measures. The responsibility for safety starts with the commander and continues through the chain of command to individuals. Safety works best when all leaders and Soldiers receive training to recognize hazards and implement controls to reduce or mitigate risks in their daily operations.

7-62. Fratricide is the unintentional killing of friendly personnel by friendly firepower. The destructive power and range of modern weapons, coupled with the high intensity and rapid tempo of combat, increase the potential for fratricide. Tactical maneuvers, terrain, and weather conditions may increase the danger of fratricide.

IMPLEMENT OPERATIONS SECURITY

7-63. Operations security is the process of identifying essential elements of friendly information and subsequently analyzing friendly actions attendant to military operations and other activities to—

- Identify those actions that can be observed by threat intelligence systems.
- Determine indicators hostile intelligence systems might obtain that could be interpreted or pieced together to derive critical information in time to be useful to adversaries.
- Select and execute measures that eliminate or reduce to an acceptable level the vulnerabilities of friendly actions to threat exploitation.

7-64. Operations security applies to all operations across the range of military operations. All units conduct OPSEC to preserve essential secrecy. Commanders establish routine OPSEC measures in unit SOPs.

CONDUCT SURVIVABILITY OPERATIONS

7-65. Survivability includes all aspects of protecting personnel, weapons, and supplies while simultaneously deceiving the enemy. Survivability tactics include building a good defense; employing frequent movement; using cover, concealment, deception, and camouflage; and constructing fighting and protective positions for both individuals and equipment.

7-66. Survivability operations are the development and construction of protective positions (such as earth berms, dug-in positions, overhead protection, and countersurveillance means) to reduce the effectiveness of enemy weapon systems. Survivability operations range from employing camouflage, cover, concealment, and deception (including the supporting task of battlefield obscuration) to hardening facilities, mission command nodes, and critical infrastructure.

7-67. Commanders may call on engineers to support the protection efforts of combat or sustainment units. Engineers can mass their skills and equipment to develop positions into fortifications or strong points and improve existing positions. Within a missile threat environment, engineers provide field fortification support to harden key assets against missile attacks. They provide survivability applications to HN facilities and U.S.-operated facilities. These applications can include entry control points, guard towers, and other means of hardening.

7-68. While survivability operations are traditionally recognized as an engineer task, units at all echelons have an inherent responsibility to improve their positions, whether a BP, bunker, or forward operating base. Survivability comprises four areas that are designed to focus efforts toward mitigating friendly losses to hostile actions or environments. The four areas are as follows:

- **Fighting positions.** The fighting position is a place on the battlefield from which troops engage the enemy with direct and indirect fire weapons. The positions provide necessary protection for personnel, yet allow for fields of fire and maneuver.
- **Protective positions.** A protective position protects the personnel and material not directly involved with fighting the enemy from attack or environmental extremes.
- **Hardened positions.** Hardening is the act of using natural or man-made materials to protect personnel, equipment, or facilities. Hardened positions protect resources from blast, direct and indirect fire, heat, radiation, or EW. Hardening is accomplished by using barriers, walls, shields, berms, or other types of physical protection. It is intended to defeat or negate the effects of an attack and includes BPs, protective positions, armored vehicles, Soldiers, and information systems.
- **Camouflage and concealment.** Camouflage and concealment, use materials and techniques to hide, blend, disguise, decoy, or disrupt the appearance of military targets and their backgrounds to prevent visual and electronic detection of friendly forces. Camouflage and concealment help prevent an enemy from detecting or identifying friendly troops, equipment, activities, or installations and include battlefield obscuration capabilities to obscure, screen, or mark. Battlefield obscuration is a major supporting task of camouflage and concealment and is typically provided by specialized CBRN elements or fires.

PROVIDE FORCE HEALTH PROTECTION

7-69. *Force health protection* encompasses measures to promote, improve, or conserve ore restore the mental and physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. These measures also include the prevention aspects of a number of Army Medical Department functions, such as (FM 4-02)—

- Preventive medicine, including medical surveillance and occupational and environmental health surveillance.
- Veterinary services, including food safety and surety, animal care missions, and the prevention of zoonotic diseases transmissible to man.
- Combat and operational stress control.
- Laboratory services, including area medical laboratory support.
- Dental services, including preventive dentistry.

7-70. Army personnel must be physically and behaviorally fit. This requirement demands programs that promote and improve the capacity of personnel to perform military tasks at high levels, under extreme conditions, and for extended periods of time. These preventive and protective capabilities include physical exercise, nutritional diets, dental hygiene and restorative treatment, combat and operational stress management, rest, recreation, and relaxation that are geared to individual and organizations.

CONDUCT CBRN OPERATIONS

7-71. CBRN operations are the employment of tactical capabilities that counter the entire range of CBRN threats and hazards. These are done through CBRN proliferation prevention, CBRN counterforce, CBRN defense, and CBRN consequence management activities in support of operational and strategic objectives to combat CBRN and operate safely in CBRN environments. Many state and nonstate actors (including terrorists and criminals) possess or have the capability to possess, develop, or proliferate CBRN. U.S. policy prohibits the use of chemical or biological weapons under any circumstances, but it reserves the right to employ nuclear weapons. Many potential enemies are under no such constraint. (Refer to FM 3-11, FM 3-11.3, and FM 3-11.4 for more information.)

MISSION-ORIENTED PROTECTIVE POSTURE ANALYSIS

7-72. Protecting Soldiers from the harmful hazards associated with CBRN attacks in an AO is essential to preserving combat power. When the probability of CBRN threats exists, commanders and leaders must conduct a deliberate analysis to posture and equip forces for survival and mission effectiveness. CBRN and medical personnel consider mission variables and related information to provide recommendations on protection requirements that are reflected in the mission-oriented protective posture (MOPP) level. Staff and leader involvement is necessary to ensure safe and sustained operations under various climatic conditions. Commanders should develop standard responses and COAs for each projected mission. The standard MOPP levels are—

- **MOPP ready.** Carry a protective mask, and ensure that individual protective gear is available within 2 hrs. Second set available in 6 hrs.
- **MOPP0.** Carry a protective mask, and ensure that individual protective gear is within arm's reach.
- **MOPP1.** Don an overgarment.
- **MOPP2.** Don protective boots.
- **MOPP3.** Don a protective mask.
- **MOPP4.** Don protective gloves.

7-73. Leaders know that they cannot expect the same work rates in MOPP4 as they achieved in MOPP0. They reevaluate the ability to meet mission requirements and communicate changes to the force. MOPP reduction decisions are among the most difficult to make because of the many considerations that affect the final decision. Commanders must evaluate the situation from the Soldier and mission perspectives. Factors include the criticality of the current mission, potential effects of personnel exposure, and the impact on the casualty care system. Commanders can then determine what follow-on COAs to employ.

7-74. Leaders determine the appropriate MOPP level by assessing mission variables and weighing the impact of increased protection levels. Higher headquarters provide MOPP-level directives to subordinate elements.

7-75. When a CBRN attack is recognized, everyone in the company team must receive the warning and assume the appropriate MOPP level. Soldiers in immediate danger need warnings they can see or hear. The alarm or signal must be simple and unmistakable if it is to produce a quick and correct reaction. Units that are not immediately affected need the information as well, either to prepare for the hazard or to change plans.

7-76. If a CBRN hazard is located, the contaminated area should be marked. The CBRN warning and reporting system and standardized contamination markers contribute to orderly warning procedures. Warning methods include automatic alarms, vocal alarms (a shout of "GAS" is the most frequently used alarm), nonvocal alarms (horn blasts or banging of metal-to-metal objects), and visual alarms, most commonly the appropriate hand-and-arm signals.

DEFENSE DURING A CHEMICAL ATTACK

7-77. The first Soldier or element to detect a chemical attack or hazard gives the appropriate alarm. All unmasked soldiers put on their protective masks and other MOPP gear. All personnel should move inside their vehicles; in most cases, they should place their hatches in the closed position to protect against gross contamination. Crews of vehicles that are equipped with CBRN over pressurization turn the system on. The commander directs use of the M256 chemical agent detector kits to determine the type of agent and forwards an NBC-1 chemical report. The company team continues the mission when the appropriate defensive measures are completed.

Unmasking Procedures

7-78. Soldiers should unmask as soon as possible except when a live biological or toxin attack is expected. Use the procedures outlined in the following paragraphs to determine if unmasking is safe.

Unmasking With M256/M256A1 Detector Kit

7-79. If an M256/M256A1 detector kit is available, use it to supplement unmasking procedures. The kit does not detect all agents; therefore, proper unmasking procedures, which take approximately 15 minutes, must still be used. If all tests with the kit (including a check for liquid contamination using M8 detector paper) have been performed and the results are negative, use the following procedures:

- The senior person should select one or two Soldiers to start the unmasking procedures. If possible, they move to a shady place; bright, direct sunlight can cause pupils in the eyes to constrict, giving a false symptom.
- Selected Soldiers unmask for 5 minutes, then clear and reseal masks.
- Observe the Soldiers for 10 minutes. If no symptoms appear, request permission from higher headquarters to signal "ALL CLEAR."
- Watch all soldiers for possible delayed symptoms. Always have first-aid treatment immediately available in case it is needed.

Unmasking Without M256/M256A1 Detector Kit

7-80. If an M256/M256A1 kit is not available, the unmasking procedures take approximately 35 minutes. When a reasonable amount of time has passed after the attack, find a shady area; use M8 paper to check the area for possible liquid contamination. Conduct unmasking using these procedures:

- The senior person selects one or two Soldiers. They take a deep breath and break their mask seals, keeping their eyes wide open.
- After 15 seconds, the Soldiers clear and reseal their masks. Observe them for 10 minutes.
- If no symptoms appear, the same Soldiers break seals, take two or three breaths, and clear and reseal masks. Observe them for 10 minutes.
- If no symptoms appear, the same Soldiers unmask for 5 minutes, then remask.
- If no symptoms appear in 10 minutes, request permission from higher headquarters to signal "ALL CLEAR." Continue to observe all Soldiers in case delayed symptoms develop.

Levels of Decontamination Operations

7-81. The principles listed for decontamination involving persistent agents are consistent with doctrine that places the burden of decontamination at the task force level. Nonetheless, the company team must develop a thorough SOP, covering decontamination methods and priorities, that will allow it to use all available assets efficiently and as required.

7-82. The remainder of this section provides a detailed discussion of the levels of decontamination activities in which the company team may be involved.

Immediate Decontamination

7-83. Immediate decontamination is a basic soldier survival skill carried out by soldiers as soon as possible after they discover they are contaminated. Its basic purposes are to minimize casualties, save lives, and limit the further spread of contamination. Any contact between chemical or toxic agents and bare skin should be treated as an emergency. Some agents can kill if they remain on the skin for longer than a minute. The best technique for removing or neutralizing these agents is to use the M291 skin decontamination kit. Leaders must ensure that their Soldiers are trained to execute this technique automatically, without waiting for orders.

7-84. Personal wipe down should begin within 15 minutes of contamination. The wipe down removes or neutralizes contamination on the hood, mask, gloves, and personal weapon. For chemical and biological contamination, Soldiers use mitts from the M295 individual equipment decontamination kit. For radiological contamination, they wipe off the contamination with a cloth or simply brush or shake it away.

7-85. Operator's spray down of equipment should begin immediately after completion of personal wipe down. The spray down removes or neutralizes contamination on the surfaces operators must touch frequently to perform their mission. For chemical and biological contamination, operators can use on-board decontamination apparatuses, like the M11/M13, or the M295 individual equipment decontamination kit to decontaminate surfaces to which DS2 cannot be applied.

Note. DS2 must be washed off surfaces no more than 30 minutes after application. If necessary, use 5-gallon water cans or other water sources to assist in removing DS2.

7-86. For radiological contamination, they brush or scrape away the contamination with whatever is at hand or flush it with water and wipe it away.

Operational Decontamination

7-87. Operational decontamination allows a force to continue fighting and sustain momentum after being contaminated. It limits the hazard of transferring contamination by removing most of the gross contamination on equipment and nearly all the contamination on individual soldiers. This speeds the weathering process and allows clean areas (people, equipment, and terrain) to stay clean. Following operational decontamination, Soldiers who have removed sources of vapor contamination from their clothing and equipment can use hazard-free areas to unmask temporarily and eat, drink, and rest. (Refer to FM 3-11.5 for more information.)

PROVIDE EXPLOSIVE ORDNANCE DISPOSAL AND PROTECTION SUPPORT

7-88. The mission of explosive ordnance disposal is to eliminate or reduce the effects of explosive ordnance hazards to protect combat power. Explosive ordnance hazards are ever-present dangers on the modern battlefield. They limit battlefield mobility, deny the use of critical assets, and threaten to injure or kill Soldiers at levels unprecedented in the past. U.S. and coalition use of munitions that disperse submunitions across a wide area has led to increased amounts of unexploded explosive ordnance on the battlefield. Explosive ordnance disposal forces are trained, equipped, and organized to deal with the increased quantity, sophistication, and lethality of explosive ordnance and support U.S. and coalition forces across the range of military operations. (Refer to ATP 4-32 for more information.)

COORDINATE AIR AND MISSILE DEFENSE

7-89. Enemy air forces will attempt to attack friendly ground forces and attempt to destroy or disrupt their operations. The company team commander must be able to employ all available active and passive air defense measures. The team can mass the fires of its individual and crew-served weapons against any enemy aircraft to provide a significant terminal defense. In addition, every member of the company team must be capable of firing at attacking air platforms.

PASSIVE AIR DEFENSE

7-90. Passive air defense consists of all measures taken to prevent the enemy from detecting and/or locating the unit, to minimize the target acquisition capability of enemy aircraft, and to limit damage to the unit if it comes under air attack. One advantage the company team can exploit is that target detection and acquisition are difficult for crews of high performance aircraft. In most cases, enemy pilots must be able to see and identify a target before they can launch an attack.

7-91. The company team should follow these guidelines to avoid detection and/or to limit damage:

- When stopped, occupy positions that offer cover and concealment; dig in and camouflage vehicles that are exposed. When moving, use covered and concealed routes.
- Disperse vehicles as much as possible to make detection and attack more difficult.
- Wipe out track marks leading to vehicle positions, and eliminate or cover the spoil from dug-in positions.
- If moving when an enemy aircraft attacks, disperse and seek covered and concealed positions.
- Do not fire on a hostile fixed-wing aircraft unless it is clear that the aircraft has identified friendly elements. Premature engagement will compromise friendly positions.
- Designate air guards for every vehicle and/or position, and establish and maintain 360-degree security.
- Establish an air warning system in the unit SOP, including both visual and audible signals.

7-92. When the company team observes fixed-wing aircraft, helicopters, or UAVs that could influence its mission, it initially takes passive air defense measures unless the situation requires immediate active measures. This reaction normally will be in the form of each platoon's react to air attack battle drill; however, the commander can initiate specific passive measures if necessary. See the passive air defense guidelines for the company team discussed earlier in this section.

Note. Passive air defense also includes the company team's preparations for conducting active air defense measures.

7-93. Passive air defense involves these three steps:

- **Step 1** – **Alert the company team with a contact report.**
- **Step 2** – **Deploy or take the appropriate actions**. If the company team is not in the direct path of an attacking aircraft, the commander or the platoon leaders order vehicles to seek cover and concealment and halt with at least a 100-meter interval between vehicles. The team also may be ordered to continue moving as part of the task force.
- **Step 3 – Prepare to engage.** Fighting vehicle crews prepare to engage the aircraft with machine gun or main gun fire on order of the commander or their platoon leaders.

ACTIVE AIR DEFENSE

7-94. If the commander determines that the company team is in the direct path of attacking aircraft, he initiates active air defense procedures, including react to air attack drills by the team's platoons. Active air defense entails the following steps:

- **Step 1 – Initiate fires.** The primary intent is to force aircraft to take self-defense measures that alter their attack profile and reduce their effectiveness. Leaders may use a tracer burst to designate an aim point for machine gun antiaircraft fires. Volume is the key to effectiveness; tanks and BFVs throw up a "wall of steel" through which aircraft must fly. Effective in company team air defense

employment are the tank main gun and TOW and Javelin missiles against hovering attack helicopters, the tank main gun and BFV 25-mm cannon against moving helicopters, and the tank main gun multipurpose antitank round (MPAT) round against high performance aircraft.

- **Step 2 – Create a nonlinear target**. Vehicles move as fast as possible at a 45-degree angle away from the path of flight and toward attacking aircraft. Each platoon maintains an interval of at least 100 meters between vehicles, forcing aircraft to make several passes to engage the entire platoon.
- **Step 3 – Move quickly to covered and concealed positions and stop.** Vehicles freeze their movement for at least 60 seconds after the last flight of aircraft has passed.
- **Step 4 – Send a SPOTREP.** The commander or XO updates the task force commander on the situation as soon as possible.

CONDUCT PERSONNEL RECOVERY

7-95. Personnel recovery is the overarching term for operations that focus on recovering isolated or missing personnel before they become detained or captured. Personnel recovery operations are conducted to recover and return personnel who are isolated, missing, detained, or captured in an operational area. These personnel consist of U.S. forces, Army civilians, or other personnel who are in an operational environment beyond the Army's positive or procedural control, requiring them to survive, evade, resist, or escape. Every unit must have procedures in place to recover personnel. (Refer to FM 3-50 for more information.)

7-96. Commanders must understand the operational environment and the impact of political, military, economic, social, infrastructure, information, physical environment, and time (PMESII-PT) to ensure that personnel recovery is incorporated into and supports each mission. This includes the characteristics of the particular operational environment and how aspects of the environment become essential elements in shaping the way that Army forces conduct operations. Threats to isolated Soldiers will vary based on the operational environment.

7-97. Personnel recovery is not a stand-alone mission; it is incorporated into mission planning. Commanders provide personnel recovery planning guidance within their initial guidance. Personnel recovery guidance provides a framework for how the unit and subordinates will synchronize the actions of isolated personnel and the recovery force. Effective personnel recovery planning guidance accounts for the operational environment and the execution of operations.

SECTION IV – AVIATION

7-98. Army aviation uses maneuver to concentrate and sustain combat power at critical times and places to find, fix, and destroy threat forces. Aviation units design, tailor, and configure their assets in support of the company team for specific operational support based on mission guidance and the specific theater in which the units operate. The organization could be any combination of attack reconnaissance, assault, lift, and maintenance units.

7-99. The principles and guidelines for employment of aviation assets are as follows:

- Fight as an integral part of the combined arms team.
- Exploit the capabilities of other branches and services.
- Capitalize on information collection capabilities.
- Suppress threat weapons and acquisition means.
- Exploit firepower, mobility, and surprise.
- Mass forces.
- Use terrain for survivability.
- Displace forward elements frequently.
- Maintain flexibility.
- Exercise staying power.

AIR/GROUND OPERATION

7-100. The operational environment requires combined arms at all levels; therefore, the likelihood of company commanders receiving attack and utility aviation assets in an operational control status is ever increasing. The following are considerations for the company commander when receiving aviation assets:

- Exchange of frequencies/call signs, frequency modulation check-in times, and synchronization.
- Terrain model and radio rehearsals, along with conducting regular training events.
- Location of air corridors and air control points.
- Location of aerial attack-by-fire/support-by-fire/BPs.
- Identification method for marking ground targets and SOPs.
- Aircraft weapons configuration capabilities and limitations of each force.
- Friendly recognition symbols for both aircraft and ground vehicles.
- Fire coordination measures.
- Location and marking of LZs and PZs for medical evacuation, CASEVAC, and aerial resupply.
- Mission command.

7-101. Ground maneuver commanders must understand that aviation forces can provide a significant advantage during operations. The company commander must understand that the unique capabilities of Army aviation require unique planning and coordination. The military decision-making process and TLP must fully integrate Army aviation forces to ensure effective combined arms employment. Effective combined arms employment requires that aviation and ground maneuver forces synchronize their operations by operating from a common perspective. This section highlights some possible procedures that aid in creating a common air-ground perspective.

CLOSE COMBAT ATTACK

7-102. When the company team engages in CCA on the battlefield, it may request CCA support. Close combat attack as a hasty or deliberate attack by Army aircraft providing air-to-ground fires for friendly units engaged in close combat as part of the Army combined arms team. Due to the close proximity of friendly forces, detailed integration is required. The capabilities of the aircraft and the enhanced situational awareness of the aircrews, terminal control from ground units or controllers is not necessary. **CCA is not synonymous with CAS**.

7-103. In most cases, Army attack reconnaissance helicopters are either employed by a preplanned mission or on an immediate or emergency basis. Attack reconnaissance aircraft engage targets near friendly forces, thereby requiring detailed integration of fire and maneuver of ground and aviation forces. To achieve desired effects and reduce risk of fratricide, air/ground integration must take place down to team levels. Both types of CCA represent a powerful battlefield asset, capable of destroying threat elements of varying sizes, including large Armor formations and during counter-insurgency operations in urban terrain. Most aspects of CCA employment and target effects are similar to those for CAS that fixed-wing aircraft provide.

EMPLOYMENT CONSIDERATIONS

7-104. Mission success in CCA employment is dependent on leaders conducting detailed planning and coordination between the aerial attack team and the ground unit already engaged in close combat. Once execution begins, there must be effective integration of the fires and movement of both maneuver and aerial elements. (Refer to FM 3-04.126 for more information.)

Planning and Reconnaissance

7-105. Planning for attack reconnaissance helicopter support usually begins at squadron/battalion level or above. The squadron/battalion provides the aviation brigade or CAB with information on locations, routes, and communications before the attack team's departure from its AA. As part of this effort, the company team and platoons usually provide information for CCA employment. All company Soldiers should familiarize themselves with the procedures used to call for attack reconnaissance helicopter support. If attack reconnaissance helicopter assets are working for their battalion, the company provides suppressive fires on any known or suspected threat air defense artillery locations.

7-106. Critical elements of the planning process are the procedures and resources used in marking and identifying targets and friendly positions. Leaders consider these factors thoroughly, regardless of the time available to the ground and air commanders.

Coordination

7-107. The aerial attack team coordinates directly with the lowest-level unit in contact on the company team command net. Whenever practical, before the attack team launches the CCA operation, the ground leader conducts final coordination with attack reconnaissance helicopters in a concealed position known as the aerial holding area. The holding area is a point in space within the supported unit's AO that is oriented toward the threat; it allows the attack team to receive requests for immediate CCA and expedite the attack. The aerial holding area could be an alternate BP positioned out of range of the threat's direct fire and indirect fire weapons ranges.

7-108. Final coordination between the ground and helicopter units must include agreement on methods of identifying and marking friendly and threat positions. This should take advantage of the equipment and capabilities of the attack team, including the Forward-Looking Infrared System, the Thermal Imaging System, and night-vision devices.

7-109. Coordination should cover the BPs, attack-by-fire, or support-by-fire positions used by attack reconnaissance helicopters. The commander should offset these positions from the ground maneuver unit to maximize the effects of the attack team's weapons and to minimize the risk of fratricide. To prevent indirect fires within the AO from posing a danger to the helicopters, the ground commander informs direct support (DS) artillery and organic mortars of the aerial positions and coordinates through the FSO and BN/SQDN (squadron) fires support element for de-confliction.

AIR MOVEMENT

7-110. Air movement operations are conducted to reposition units, personnel, supplies, equipment, and other critical combat elements in support of current and future operations. These operations include both airdrops and air landings.

7-111. Planning for air movements is similar to that for other missions. Besides the normal planning process, air movement planning must cover specific requirements for air infiltration and exfiltration. The requirements are as follows:

- Coordinate with the supporting aviation unit(s).
- Plan and rehearse with the supporting aviation unit before the mission if possible. If armed escort accompanies the operation, the commander—as well as the assault or general support aviation unit—should ensure that aircrews are included in the planning and rehearsal.
- Gather as much information as possible, such as the enemy situation, in preparation for the mission.
- Plan and coordinate joint suppression of enemy air defenses.

7-112. The unit should plan different ingress and egress routes, covering the following:

- Planned insertion and extraction points.
- Emergency extraction rally points.
- Lost communications extraction points.

7-113. Planned extraction points and emergency extraction rally points require communications to verify the preplanned pickup time or coordinate an emergency pickup time window. Planning must include details for extraction when communications between higher headquarters and the unit are lost. The lost communications extraction point involves infiltration teams moving to the emergency extraction point after two consecutive missed communications windows and waiting up to 24 hours for pickup.

AIR RESUPPLY

7-114. The company team may operate in forward locations and even distant hide positions requiring helicopter resupply including both internal and external load operations.

7-115. Planning for aerial resupply requires close coordination, with elements reviewing the entire mission and resolving all limitations and problem areas. If a resupply item poses a problem that cannot be resolved, leaders should consider another mode of transport. Planning factors include the following:

- Priorities of cargo/unit resupply.
- Integration of the resupply operation into the tactical plan.
- Selection, identification, and marking of the PZ/LZ.
- Type/amount of cargo.
- Helicopter assets available.
- Requirements for slings, cargo nets, and cargo containers.
- Ground crew-training requirements; such as those for ground guides and hookup personnel.
- PZ and LZ security.
- Flight routes.

7-116. The selection of a usable PZ or LZ is extremely important. The company analyzes logistical and tactical considerations taking into account that PZ/LZ positioning is at the right place to support the ground unit. The area must be accessible to the aircraft involved in the resupply operation. The air mission commander, the pilot in command, an aviation liaison officer, or a Pathfinder-qualified officer or NCO make the final decision on PZ/LZ selection and acceptance.

7-117. The company team receiving the supplies is responsible for preparing the PZ/LZ. Besides the general PZ/LZ responsibilities, the company performs the following specific tasks for aerial resupply:

- Recover and assemble equipment and supplies.
- Train available ground crews to guide the aircraft during approach, landing, unloading/loading, departure, and de-rigging the load.
- Train hookup personnel.
- Coordinate with the sending unit for the control and return of that unit's transport equipment, such as slings and A-22 bags.
- Prepare, coordinate, and inspect backloads (such as slings and A-22 bags) and have them ready for hookup or loading when the aircraft arrives.

SECTION V – INFORMATION OPERATIONS

7-118. Information operations integrate the employment of information-related capabilities with other lines of operation to influence, disrupt, corrupt, or usurp the decision-making of adversaries and potential adversaries while protecting our own. Units want the civilian population in their area of operations to be neutral, or in favor of their activities. Leader engagements at all levels are the key to influencing the local populace perception of U.S. presence.

7-119. Unified land operations requires effective commanders to consider what will affect the OE. Commanders lead information operations while considering the following: combat power, mission command, mission command system, themes and messages, information management and knowledge management, legal considerations, and intelligence support.

7-120. The company may face situations in which leaders need to conduct negotiations. There are two general types of negotiations: situational and planned. Units conduct situational negotiations in response to a requirement for on-the-spot discussion and resolution of a specific issue or problem. For example, a unit is patrolling its AO when a local official approaches; the local official wishes to discuss an assault that occurred in the area. Units conduct planned negotiations when they foresee a problem or identify a situation that must be resolved through advanced planning and coordination. (For example, a company commander conducts a coordination meeting between leaders of two belligerent groups to determine route clearance responsibilities.)

7-121. At the company level, situational negotiations are far more common than the planned type. In fact, employment in operations focused on stability tasks requires the commander, his subordinate leaders, and other Soldiers to conduct negotiations almost daily. This requires them to have a thorough understanding of the ROE.

7-122. Members of the company apply this working knowledge to the process of discussing and, whenever possible, resolving issues and problems that arise between opposing parties, which may include the team itself.

7-123. The commander must understand what and how much he is authorized to promise. A critical aspect of this knowledge is the negotiator's ability to recognize that he has exhausted his options under the ROE and must turn the discussion over to a higher authority. Negotiations continue at progressive levels of authority until the issue is resolved.

7-124. Planned negotiations require negotiators to thoroughly understand either the dispute or issue at hand, the interests at stake for both sides and the factors influencing it, such as the ROE, before talks begin. The negotiator's ultimate goal is to reach an agreement that is acceptable to both sides and that reduces antagonism (or the chance of renewed hostilities) between the parties involved.

SECTION VI – MILITARY INFORMATION SUPPORT OPERATIONS

7-125. Military information support operations (MISO) forces provide the commander with an increased ability to degrade the enemy's will to fight, reduce civilian interference, minimize collateral damage, and increase relevant and local population support for operations. These forces operate as three, five-man teams, and are integrated with maneuver units to conduct MISO. A MISO team leader advises the commander on the use of information, and is responsible for the integration and employment of the team. The team leader serves as a planner in the absence of a MISO planner on the supported unit's staff.

CAPABILITIES

7-126. MISO capabilities include—

- Influencing foreign populations through planned messages, activities, and actions that target select individuals and populations to affect decision making and change behavior.
- Advising the commander on the psychological effects of military actions in the operational environment, and providing cultural expertise.
- Delivering messages to intended audiences to inform, influence and direct.
- Collecting, processing, and analyzing information to enhance the commander's understanding of the OE and to facilitate decision making.
- Training, advising, and assisting government organizations and security forces to establish HN/partner nation information capabilities.

PLANNING CONSIDERATIONS

7-127. Planning and employment considerations for MISO include the following:

- Approval authority—Messages and actions intended to influence foreign populations must follow higher-level programs, plans, objectives, themes, and orders.
- Interpreter—When language requirements exceed the abilities of the MISO team members, an interpreter is required.
- Security—MISO teams rely on the supported unit to provide security.
- Intelligence—MISO activities require continuous, accurate, and timely intelligence to assess changes in decision making and actions.
- Mobility—Mission analysis determines if organic transportation assets of the MISO team are adequate for the terrain to be navigated. Provisions for transporting team members, equipment, and products may be needed in difficult terrain or conditions.

SECTION VII – SPECIAL OPERATIONS FORCES

7-128. Special Forces may operate with the company team or within their area of operation and with Infantry units conducting operations inside a joint special operations area. Physical contact between Armor and mechanized Infantry units and Special Forces operation may range from short-term direct action operations to sustained combat operations. It is essential to conduct adequate coordination and integration to

accomplish the specific mission. Special Forces operations have several elements to aid in coordination at the battalion level and above.

7-129. The company team may conduct operations with or in support of SOF in the OE. Detailed planning and coordination may be required. In today's OE, the company team may find SOF operating within or near its area of operation. To maximize their combined combat power, these forces need to share an appreciation and understanding of each other's mission, purpose, capabilities, and limitations. For more information. (Refer to ADP 3-05, ADRP 3-05, and FM 3-05 for more information.)

7-130. When operating with or near SOF, the company commander should coordinate, at a minimum, the following with the SOF unit leader:

- Mission command relationship.
- Communication information (frequencies, call signs, challenge and passwords, emergency signals and codes).
- Safe house locations.
- Number and types of vehicles.
- Control measures being used.
- Battle handover criteria.
- Liaisons.
- Sustainment plans.
- Contingency plans for mutual

SECTION VIII – CIVIL AFFAIRS

7-131. Civil affairs (CA) activities are military operations planned, supported, or executed by CA forces. These operations are coordinated through, planned with, and supported by the indigenous population, intergovernmental organizations, NGOs, or other government agencies. CA operations modify behaviors and mitigate or defeat threats to civil society. They involve application of CA functional specialty skills, in areas that are usually the responsibility of civil government. Civil affairs personnel, other Army forces, or a combination of the two perform these tasks. These activities are fundamental to executing stability tasks. (Refer to FM 3-57 for more information.)

7-132. In operations focused on stability tasks, CA forces work with and through HN agencies and other civilian organizations to enhance the HN government's legitimacy.

7-133. Often, civil affairs teams work with or alongside the company during operations focused on stability tasks. A framework for evaluating civil considerations is called ASCOPE. Each consideration is described as follows:

- **Areas.** These determine the geographic variations in the area of responsibility, their potential military impact, and how they influence how people live.
- **Structures.** These describe man-made structures in which the people live and work and determine those that have cultural, religious, and economic significance.
- **Capabilities.** These determine the ability of various groups to influence the area of responsibility and the rest of the population relative to their possible intent to do so; they determine economic and military potential given the areas and infrastructure.
- **Organizations.** These determine what informal and formal social, religious, familial or political organizations exist and what their intent, purpose and resources are.
- **People.** These determine how the population aligns with organizations and one another; they determine if they are likely to be supportive, detrimental, or neutral to the unit's mission.
- **Events.** These create significant population event templates and determine if future activity can be predicted based on pattern analysis.

Chapter 8

Sustainment

Sustainment is the provision of the logistics, personnel services, and Army health protection necessary to maintain operations until mission accomplishment (ADRP 4-0). In the company team, the commander has the ultimate responsibility for sustainment. The XO and the 1SG are the team's primary sustainment operators; they work closely with the CAB staff to ensure they receive the required support for the team's assigned operations. This chapter discusses responsibilities, unit combat and basic loads, trains, and functions of sustainment.

SECTION I – FUNCTIONS OF SUSTAINMENT

8-1. This section discusses functions of sustainment including development of the company sustainment plan, company trains operations, emergency resupply, pre-positioned supplies, transportation, maintenance, human resources support, and medical support.

CONCEPT OF SUPPORT

8-2. The company teams are dependent on the CAB forward support company for resupply and most sustainment operations. The company XO, 1SG, and supply sergeant are the key personnel in the company for coordinating and executing company-level sustainment.

8-3. The general methods of resupply operations are routine, emergency, or prestock (caches). The company team SOP specifies cues and procedures for each method, which the company team rehearses during team training exercises. The actual method selected for resupply in the field depends on the mission variables.

8-4. The company team must plan, prepare, and execute its portion of the CAB sustainment plan. Concurrent with other operational planning, the team develops its sustainment plan during mission analysis and refines it in the war-gaming portion of the troop leading process. Rehearsals normally conducted at both the CAB and company team levels ensure the company receives a smooth, continuous flow of materiel and services.

DEVELOPMENT OF COMPANY SUSTAINMENT PLAN

8-5. The company commander develops his sustainment plan by determining exactly which supplies he has on hand and then estimating his support requirements. If equipped with FBCB2, the commander reviews his commander's tracked item list and verifies his supply status at any time. He uses available information from his mission analysis and war-gaming to aid the sustainment plan development. This process is important not only to confirm the validity of the sustainment plan but to ensure that the team's support requests are submitted as early as possible.

8-6. The commander formulates his logistics execution plan and submits support requests based on the results of his COA analysis and the war-gaming and refinement of his maneuver plan. The sustainment plan should answer a variety of operational questions, such as—

- Based on the nature of the operation and specific tactical factors, what support will the company team need?
- In which quantities will this support be required? These questions should be answered:
  - Will emergency resupply be required during the battle?
  - Does this operation require prestock supplies?

- What are the composition, disposition, and capabilities of the expected enemy threat and how will these factors affect logistics operations during the battle? These questions should be answered:
  - Where and when will the expected contact occur?
  - Based on the nature and location of expected contact, what are the company team's expected casualties and vehicle losses?
  - What impact will the enemy's special weapons capabilities (such as CBRN) have on the battle and expected sustainment requirements?
  - How many detainees are expected and where?
- How will terrain and weather affect sustainment operations during the battle? These questions should be answered:
  - What ground will provide optimum security for the trains?
  - What ground will provide optimum security for maintenance and casualty collection points?
  - What are the company team's vehicle and casualty evacuation routes?
  - What are the team's "dirty" routes for evacuation of contaminated personnel, vehicles, and equipment?
- When and where will the company team need sustainment? These questions should be answered:
  - Based on the nature and location of expected contact, which sites are best for the maintenance collection points?
  - Based on the nature and location of expected contact, which sites are the best for the casualty collection points? Where will the detainee collection points be located?
  - Which logistic release point (LRP) will be active during the battle? When will they be active?
- What are the criteria and triggers for the movement of the company combat trains?
- What are the support priorities (by element and type of support)? These questions should be answered:
  - Which platoon has priority for emergency Class III resupply?
  - Which platoon has priority for emergency Class V resupply?
- Will there be lulls in the battle that will permit support elements to conduct resupply operations in relative safety? If no lulls are expected, how can the company team best minimize the danger to the sustainment vehicles?
- Based on information developed during the sustainment planning process, which resupply technique should be used?

8-7. Thorough briefings and comprehensive rehearsals are important keys to effective sustainment planning. These activities play a critical role to ensure that the company team executes its sustainment plans efficiently. They allow the commander, subordinate leaders, and each crewman to discover potential problem areas and to develop contingency plans to preclude unforeseen difficulties.

8-8. The commander has several options for conducting sustainment rehearsals. One is to integrate the sustainment rehearsal into the unit's larger maneuver rehearsals. Another is for the unit's sustainment operators to conduct a separate rehearsal. The company commander directs the XO and 1SG to rehearse sustainment operations with the team's PSG, maintenance team chief, and senior medic. Explosive ordnance disposal personnel are included as required by the mission.

COMPANY TRAINS OPERATIONS

8-9. Company trains provide sustainment for a company during combat operations. Company trains include the 1SG, company medical asset teams, supply sergeant, and the armorer. The FSC provides an FMT, with capabilities for maintenance, recovery, and limited combat spares parts. The supply sergeant can collocate in the combat trains, if it facilitates LOGPAC operations. The 1SG directs movement and employment of the company trains although the company commander may assign the responsibility to the company XO. Generally, company trains are located between 500- and 1000-meters away from the company's combat operations. By placing at least one terrain feature between them and the enemy, the company trains will be out of the enemy's direct fire weapons.

Note. Mission variables ultimately dictate the actual distance at which the trains operate.

8-10. Configuring the company trains with the assets described above gives the team almost immediate access to essential logistical functions while allowing the trains to remain in a covered and concealed position out of enemy contact. The company trains usually includes the following vehicles, with corresponding crews:

- Recovery vehicle.
- Maintenance vehicle.
- 1SG's armored vehicle.
- Armored ambulance vehicle.
- Command vehicles.
- Maintenance tool truck or forward repair system heavy, usually located in the maintenance collection point, but should repair forward when possible.

8-11. Because the security of sustainment elements is critical to the success of the company team missions, the company trains develop plans for continuous security operations. Where feasible, they plan and execute a perimeter defense. The trains, however, can lack the personnel and combat power to conduct a major security effort.

COMPANY SUSTAINMENT PERSONNEL AND ORGANIZATION

8-12. The company team's basic sustainment responsibilities are to report or request support requirements through the correct channels and to ensure that it efficiently executes sustainment operations once support elements arrive in the team area. The XO and 1SG typically control these functions, with guidance and oversight provided by the commander. They must submit accurate personnel and logistical reports, along with other necessary information and requests.

EXECUTIVE OFFICER

8-13. The XO is the company team's primary sustainment planner and coordinator, reporting directly to the commander. During preparations for the operation, he works closely with the 1SG to determine specific support requirements of the tactical plan. He makes proper arrangements to provide those support requirements. The XO performs these logistical functions:

- Determines the location of the team's resupply point based on data developed during operational planning.
- Compiles DA Forms 5988-E (*Equipment Maintenance and Inspection Worksheet)*, which is available through the ULLS-G/SAMS-E system, from the PLs, PSGs, 1SG, and maintenance team chief, and provides updates to the commander as required.
- Along with the 1SG, ensures that the company team executes sustainment operations according to the CAB plan.
- Leads the company team sustainment rehearsal in cooperation with the company 1SG.
- Assists the commander in developing sustainment priorities and guidance according to the CAB concept of support, and enforces those priorities.
- Conducts close coordination with the battalion S-4 and battalion operations staff officer for planning and to resource company missions.

FIRST SERGEANT

8-14. The 1SG is the company team's primary sustainment operator. He executes the team's logistical plan, relying heavily on team and CAB SOPs. He directly supervises and controls the company trains. The 1SG performs these sustainment functions:

- Leads sustainment rehearsals with the XO or integrates sustainment into the team's maneuver rehearsals.
- Coordinates and synchronizes human resources support with the battalion manpower and personnel staff officer (S-1). This includes personnel accountability reports, casualty reports,

replacement operations, personnel readiness management, mail operations, essential personnel services, and other administrative or personnel requirements.

- Directs and supervises CASEVAC, ensuring medical assets remain flexible and responsive to tactical operations.
- Establishes and organizes the company team resupply point.
- Meets the LOGPAC at the LRP; guides it to the company team resupply point; supervises resupply operations there; and, if necessary, guides the LOGPAC to its subsequent destination.
- Provides a company team orientation for new personnel and, in consultation with the commander, assigns replacements to the team's subordinate elements.
- Supervises evacuation of casualties, detainees, and damaged equipment.
- Directs and supervises the collection, initial identification, and evacuation of human remains to the mortuary affairs collection point (MACP).
- Maintains the company team battle roster.

SUPPLY SERGEANT

8-15. The supply sergeant is the company team's representative in the CAB's field trains. The supply sergeant performs these logistical functions:

- Coordinates with the FSC for resupply of Class I, III, V, and IX.
- Maintains individual supply and clothing records, and requisitions Class II resupply as needed.
- Requisitions Class IV and Class VII equipment and supplies.
- Picks up replacement personnel and, as needed, delivers them to the 1SG.
- Receives and evacuates human remains to the MACP in the brigade support area.
- Transports, guards, or transfers detainees as required.
- Guides the LOGPAC, along with detainees and damaged vehicles (if applicable), back to the brigade support area.
- Coordinates with the CAB S1 section to turn in or pick up mail and personnel action documents.
- Collects bagged contaminated soil and transports it to collection points as part of LOGPAC procedures.
- Maintains and provides supplies for team field sanitation activities.
- Manages commander's property book and prepares financial liability investigations of property loss.

SUPPLY AND FIELD SERVICES

8-16. The general classes of resupply operations are routine, emergency, or prestock. The company team SOP specifies cues and procedures for each method, which the company team rehearses during team training exercises. The actual method selected for resupply in the field depends on mission variables.

ROUTINE RESUPPLY

8-17. Routine resupply operations cover items in Classes I, III, V, and IX as well as mail and any other items the company team requests. Whenever possible, the company team should conduct routine resupply daily, ideally during periods of limited visibility. Because tanks and other major combat vehicles consume large amounts of fuel (for example, M1-series tanks can require multiple 8-4efueling during offensive missions), the company team must resupply Class III at every opportunity.

LOGISTICS PACKAGE OPERATIONS

8-18. The LOGPAC technique is a simple, efficient way to accomplish routine resupply operations. The key feature is a centrally organized resupply convoy originating at the CAB trains. It carries all items needed to sustain the company team for a specific period, usually 24 hours or until the next scheduled LOGPAC. Company team and CAB SOPs specify the exact composition and march order of the LOGPAC. (Refer to FM 3-90.5 for more information.)

Preparation

8-19. The company team supply sergeant first compiles and coordinates all of the team's supply requests. Based on the requests, he then assembles the LOGPAC under the supervision of the FSC or the headquarters and headquarters company/FSC commander. He obtains the following:

- Class I, Class III (bulk and packaged products), and Class V supplies from the FSC. This usually entails employment of one or two fuel heavy expanded mobility tactical trucks and one or two cargo heavy expanded mobility tactical trucks.
- Class II, Class IV (basic load resupply only), Class VI, and Class VII supplies from CAB S-4 personnel in the field trains.
- Routine Class IX supplies and maintenance documents (as required) from the prescribed load list section in the field trains.
- Replacement personnel and Soldiers returning from a medical treatment facility.
- Vehicles returning to the company team area from maintenance.
- Mail and personnel action documents (including awards, and finance and legal documents) from the FSC S-1 section.

8-20. When LOGPAC preparations are completed, the supply sergeant initiates tactical movement to the LRP under the supervision of the support PL. The supply sergeant and LOGPAC link up with the 1SG at the LRP.

Actions at Logistics Release Point

8-21. When the 1SG arrives at the LRP to pick up the company team LOGPAC, he updates all personnel and logistical reports and is briefed by the field trains OIC on any changes to the tactical or support situation. He then escorts the convoy to the company team resupply point, providing security during movement from the LRP.

RESUPPLY PROCEDURES

8-22. The time required for resupply is an important planning factor. Units must conduct resupply as quickly and efficiently as possible to ensure operational effectiveness and to allow the company team LOGPAC to return to the LRP on time. Units must also consider security while conducting LOGPAC operations. This can be using one platoon to secure the LOGPAC area, while the remaining company executes resupply. METT-TC will determine the security requirements. The company team should establish unit SOP and rehearse in ensure all elements, to include attachments, understand resupply procedures.

RETURN TO THE LRP

8-23. Once the unit completes resupply operations, the unit prepares LOGPAC vehicles for the return trip. Company team vehicles requiring recovery for maintenance or salvage are lined up and prepared for towing. Cargo trucks, fuel trucks, or damaged vehicles transport those killed in action (KIA). Enemy prisoners of war and detainees ride in the cargo trucks and are guarded by walking wounded or other company team personnel. All supply requests, human resources actions, and outgoing mail are consolidated for forwarding to the field trains, where the appropriate staff section processes them for the next LOGPAC.

8-24. The 1SG or the supply sergeant leads the LOGPAC back to the LRP, where he links up with the support PL. Whenever possible, the reunited task force LOGPAC convoy returns to the field trains together. When mission variables dictate or when the LOGPAC arrives too late to rejoin the larger convoy, company team vehicles must return to the field trains on their own. Because only minimal security assets are available, this situation should be avoided.

RESUPPLY METHODS

8-25. As directed by the commander or XO, the 1SG establishes the company team resupply point using the service station method, the tailgate method or a combination of both. He briefs each LOGPAC driver on which method or methods to use. When the resupply point is ready, the 1SG informs the commander, who in turn directs each PLT or element to conduct resupply based on the tactical situation.

Service Station Resupply

8-26. With the service station method, vehicles move individually or in small groups to a centrally located resupply point. Depending on the tactical situation, one vehicle or section or even an entire platoon moves out of its position, conducts resupply operations, and then moves back into position. This process continues until the entire company team has been resupplied.

8-27. When using this method, vehicles enter the resupply point following a one-way traffic flow. Only vehicles requiring immediate maintenance stop at the maintenance holding area. Vehicles move through each supply location, with crews rotating individually to eat, pick up mail and sundries, and refill or exchange water cans. Any detainees are centralized and guarded. Soldiers KIA and their personal effects are brought to the holding area, where the 1SG takes charge of them. When all platoon vehicles and crews have completed resupply, they move to a holding area, where, time permitting, the PL and PSG conduct a precombat inspection. The company command group (company commander, XO, and 1SG) can take this opportunity to conduct precombat inspections of each platoon as they pass through the resupply point. (See figure 8-1 on page 8-7.)

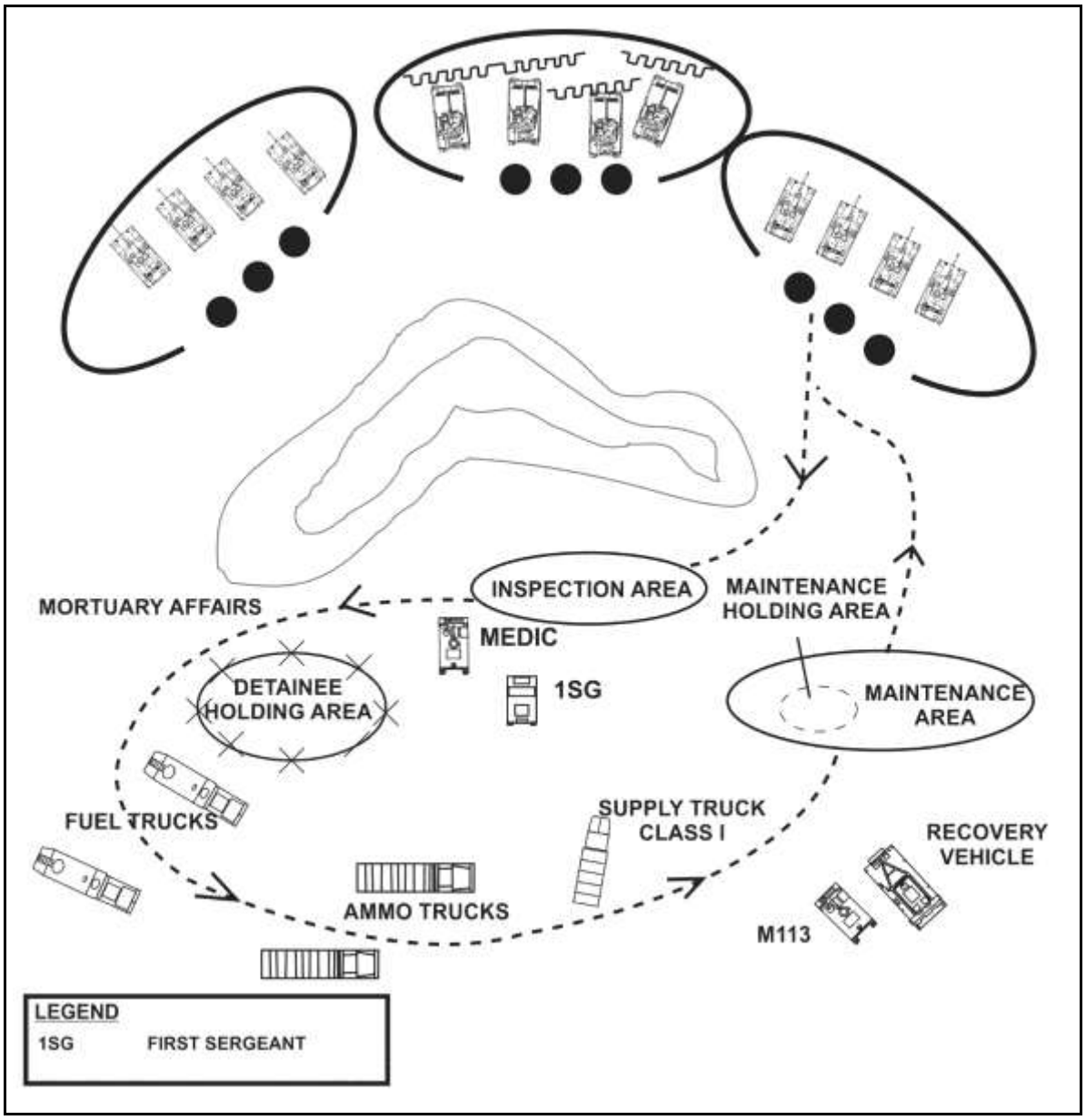


Figure 8-1. Service station method

Tailgate Resupply

8-28. Tailgate resupply usually requires significantly more time than service station operations. Usually, the company uses the tailgate method only when the tactical situation allows or dictates. Combat vehicles remain in their vehicle positions or back out a short distance to allow trucks carrying Class III and Class V supplies to reach them. Individual crewmen rotate through the feeding area, pick up mail and sundries, and fill or exchange water cans. (See figure 8-2.)

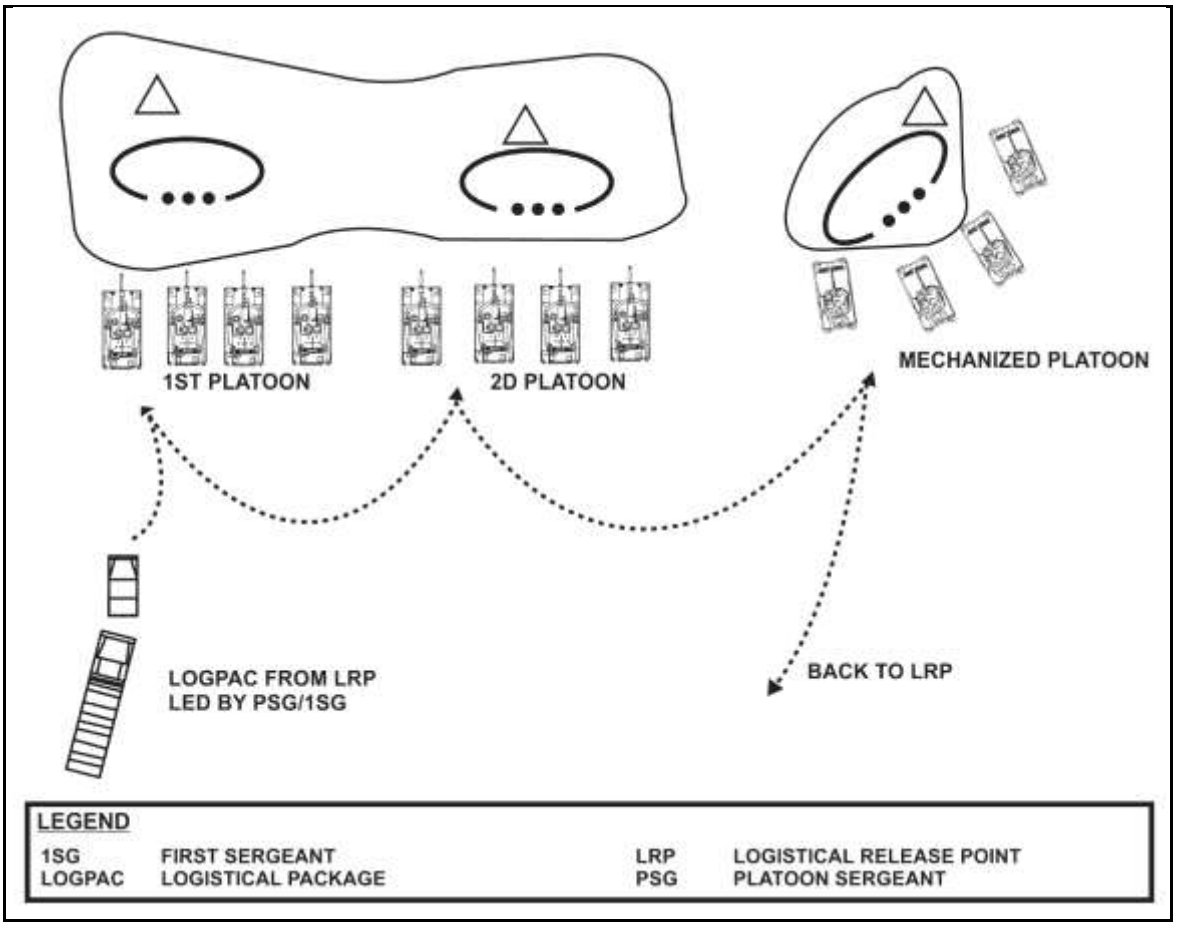


Figure 8-2. Tailgate resupply method

Combination of Service Station and Tailgate Resupply

8-29. The company team may select to employ the tailgate resupply method, but selected platoons may have to use the service station resupply method. Selected platoon(s) may use the service station resupply method and some sections may have to use the tailgate resupply method.

EMERGENCY RESUPPLY

8-30. Occasionally (usually during combat operations), the company team has such an urgent need for resupply that it cannot wait for a routine LOGPAC. Emergency resupply may involve Classes III, V, and VIII, as well as CBRN equipment and, on rare occasions, Class I. The CAB usually uses the FSC's supply and transportation platoon and medical assets located in the CAB combat trains to conduct emergency resupply of the company team.

8-31. Emergency resupply can be conducted using either the service station or tailgate method, although procedures may have to be adjusted when the company team is in contact with the enemy. In the service station method, individual vehicles pull back during a lull in combat on order of the commander or platoon leader; they conduct resupply and then return to the fight. With tailgate resupply, the company team brings limited supplies forward to the closest concealed position behind each vehicle or element.

PRE-POSITIONED SUPPLIES

8-32. Pre-positioning of supplies is most often required in defensive or operations focused on stability tasks. Usually only Class V items are pre-positioned. Class III supplies can be pre-positioned. However, this

requires company team vehicles to refuel before moving into positions during initial occupation of the BP or to move out of their positions to conduct refueling operations at the rear of the BP.

8-33. Leaders at every level carefully plan and execute pre-positioning supplies. All leaders, down to vehicle commander and squad leader, know the exact locations of prestock sites, which they verify during reconnaissance or rehearsals. The company team takes steps to ensure survivability of prestock supplies. These measures include digging in prestock positions and selecting covered and concealed positions. The commander develops a plan to remove or destroy pre-positioned supplies to prevent the enemy from capturing them. (See figure 8-3, which shows prestock resupply operations, Method 1. See figure 8-4, which shows prestock resupply operations, Method 2.)

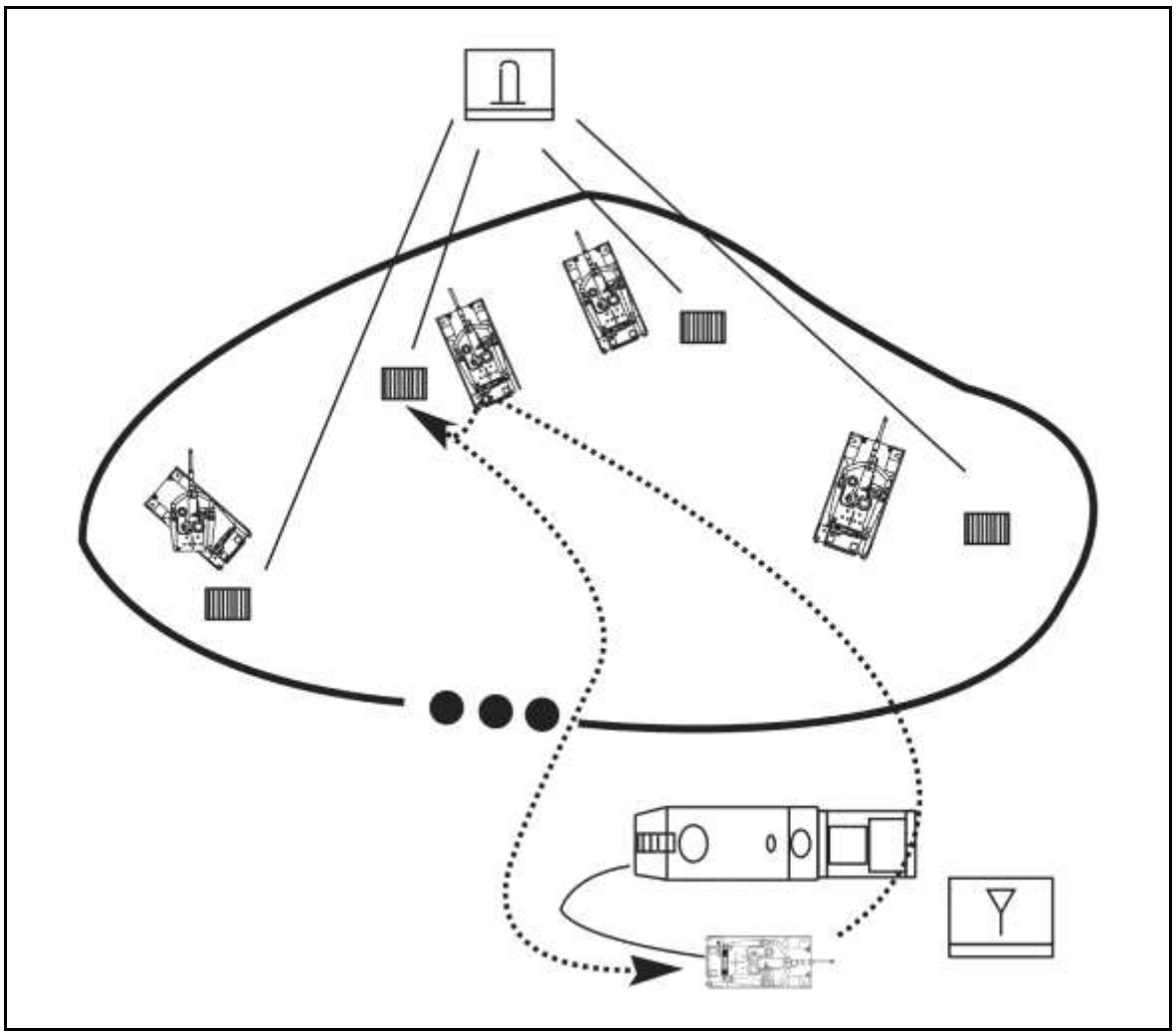


Figure 8-3. Prestock resupply operations: Method 1 (Class V prestock site for each vehicle)

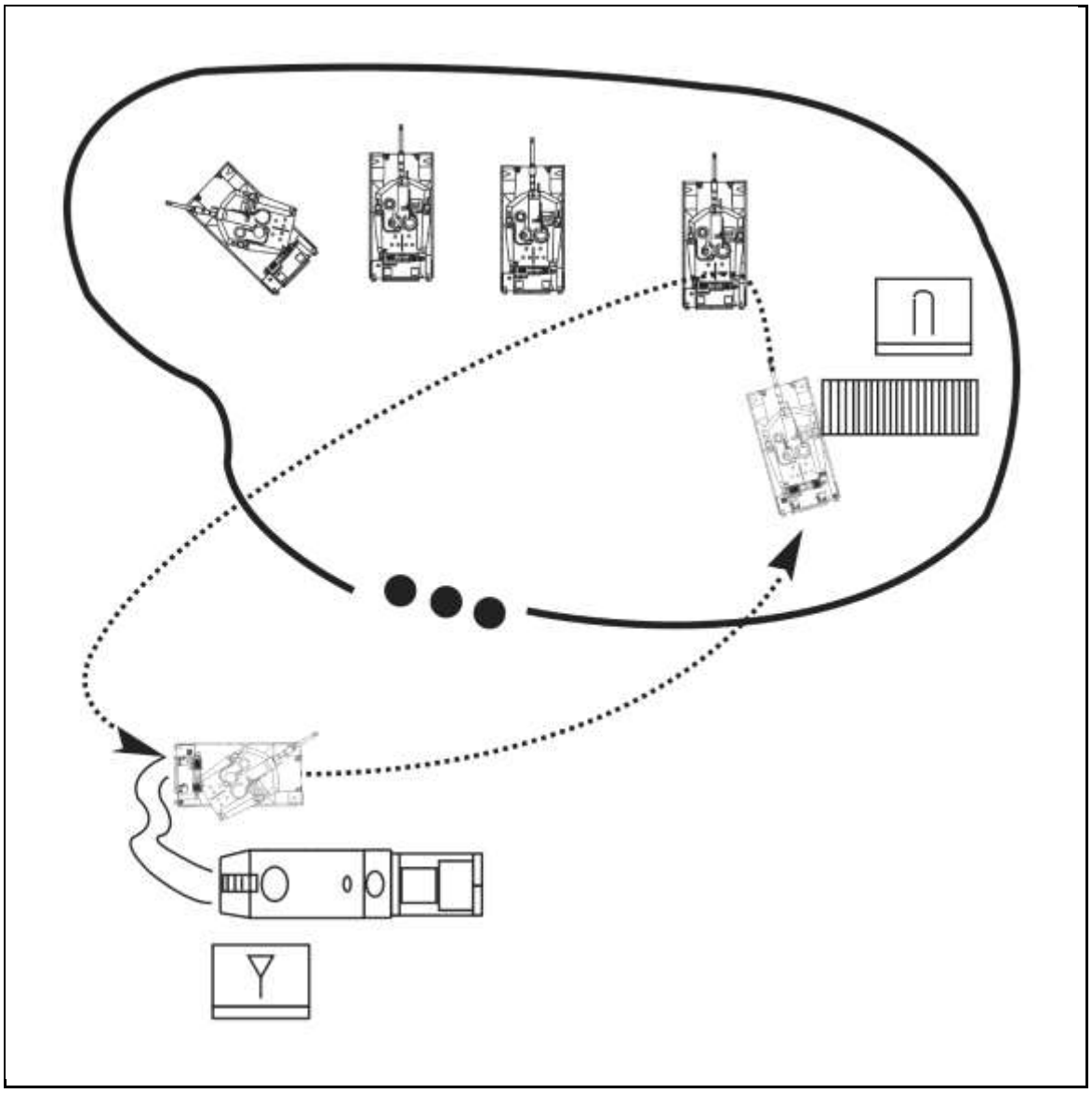


Figure 8-4. Prestock resupply operations: Method 2 (central Class V prestock site)

8-34. During offensive operations, pre-positioning of supplies in the offense is normally limited to refueling The refuel on the move (ROM) technique is planned and organized at battalion or higher level to sustain vehicles during long movements. The goal of the ROM is to ensure that vehicles are topped off before possible contact with the enemy. This technique works well if the company team expects to use a large volume of fuel during a fast-moving operation.

AERIAL DELIVERY

8-35. Aerial delivery is used as a method of resupply. When employing aerial delivery, the following should be considered:

- Aerial delivery requires the coordination of the CAB staff and the BCT battalion operations staff officer, S-4, and air defense air space management/brigade aviation element sections. Special focus must be placed on the enemy air defense capability.

- The FSC must be prepared to both receive and package bulk supplies by sling-load operations or joint precision airdrop system. To conduct these operations, sling-load trained personnel are required in the FSC's distribution platoon.
- All companies must know how to select LZ/drop zone to receive aerial resupply. The delivered supplies are immediately transported away from the LZ/drop zone (refer to FM 3-99 for more information).
- Units should return the sling- or air-delivery equipment to its owning unit.

MAINTENANCE

8-36. The Army has two levels of maintenance; field and sustainment. Field maintenance consists primarily of troubleshooting, repairing or replacing parts and assemblies on on the user's system or platform. It is the product of merging the previous organizational and direct support levels of maintenance together.

FIELD MAINTENANCE

8-37. Field maintenance is on-system maintenance and mainly involves preventive maintenance and replacement of defective parts. The goal of field maintenance is to repair and return equipment to the Soldier. It covers tasks previously assigned to operator/crew, organization/unit, and DS maintenance levels. It includes some off-system maintenance critical to mission readiness.

8-38. Company commanders ensure that vehicle crews and equipment operators perform preventive maintenance checks and services. To provide quick turnaround of maintenance problems, each maneuver company has an FMT from the supporting FSC dedicated to support them. These FMTs have forward repair systems and mechanics trained in the company's equipment. The company 1SG usually positions the FMT in the company trains.

SUSTAINMENT MAINTENANCE

8-39. Sustainment maintenance consists of repairing components off the user's platform. Those repaired components then go back into the supply system. Echelons above BCT perform this level of maintenance. To maximize unit combat readiness, maintenance personnel must repair and return the equipment to the user as quickly as possible. Repairs should be made as far forward as possible.

Flow of Maintenance Forms and Repair Parts

8-40. Maintenance concepts are evolving in replacing modular components forward and repair in the rear. Replace forward means a Soldier performs "on- system" maintenance. "On-system" refers to replacing components or subcomponents at the point of repair, the breakdown site, or the MCP. Repair rear means that Soldiers perform "off-system" maintenance. "Off-system" refers to those actions taken to return components and subcomponents of weapons systems to serviceable condition. These repairs are performed at designated places throughout the battlefield.

8-41. The link between the using organization and maintenance support is a trained operator/crew who can properly use and maintain the equipment. The continued demand for equipment requires that the operator and/or crew perform preventive maintenance checks and services. Maintainers usually diagnose down to the major component failure. They then replace that component and return the system to operational condition. Based on METT-TC, the Soldier can diagnose and replace subcomponent items depending on the availability of tools, parts, and time.

Location of the Field Maintenance Team

8-42. During offensive operations, the FMT usually follows one terrain feature behind the company team. In the defense, it is usually located in a static location one terrain feature behind the company team. This positioning enhances security and enables the FMT to react quickly when platoons request support. In some situations, METT-TC factors dictate that the FMT be positioned at the MCP to further enhance security and survivability.

Battle Damage Assessment and Repair

8-43. Commanders should address using battle damage assessment and repair (BDAR) in the logistics section of their operation order (OPORD). This provides the crews and maintainers with a clear understanding of when and at what risk level they can perform BDAR. BDAR uses emergency expedient repairs to return the system to fully or partially mission-capable status. Under combat conditions, personnel can perform BDAR on fueled or armed systems. The commander may also waive other precautions. All operations must be conducted as safely as possible. See ATP 4-31 for more details about BDAR procedures.

Maintenance Collection Points Operations

8-44. When a vehicle or piece of equipment cannot be fixed quickly on site, it is moved to the CAB MCP, where it is repaired by the FSC. When not involved in on-site actions, the FMT can assist with operations in the MCP. Vehicles that cannot be repaired within the established timelines or that would overload the MCP's capability are moved to the field trains.

HUMAN RESOURCES SUPPORT

8-45. Human resources support all functions that affect the Soldier's status, readiness, and welfare. It includes essential personnel services such as evaluations, leaves and passes, awards and decorations, rest and recuperation, postal, personnel accountability, casualty operations, and personnel information management.

POSTAL SERVICES

8-46. The battalion mail clerk receives and distributes Soldier mail to the company mail clerk, usually the supply sergeant, who delivers it to the 1SG, PSG, or Soldier. All outgoing and returned mail is given to the supply sergeant or 1SG during resupply and is turned over to the S-1 section when the LOGPAC returns to the field trains.

PERSONNEL MANAGEMENT/STRENGTH REPORTING

8-47. Personnel accounting is the process of recording by-name data on Soldiers when they arrive, depart, change duty location, or change duty status. Strength reporting is the numerical end product of the by-name accounting process. First sergeants are critical participants in this process. They must be very sensitive to the accuracy and timeliness of all personnel accounting reports. They should pay special attention to Soldiers who have changed status in the medical treatment process and task organization changes when they submit their reports.

CASUALTY OPERATIONS

8-48. Casualty operations include production, dissemination, coordination, validation, and synchronization of information regarding each casualty. This information includes casualty reporting, casualty notification, casualty assistance, line-of-duty determination, disposition of remains, disposition of personal effects, military burial honors, and casualty mail coordination.

Unit Reporting

8-49. As casualties occur, the nearest observer informs the company 1SG via the most expedient method available (for example, free text within FBCB2, frequency modulation voice). The 1SG submits a personnel situation report to the S-1 section. This report documents duty status changes on all casualties. Casualties are taken to casualty collection points for classification of injury type (routine, urgent, return to duty), evacuation, and integration into the medical treatment system. The 1SG ensures completed DA Form 1156s (*Casualty Feeder Card)* are forwarded to the S-1, who then enters the data into the Defense Casualty Information Processing System.

8-50. Commanders and their 1SGs must establish procedures to ensure that the Soldier's next of kin are notified properly and according to procedure. The potential for unofficial communications that exist with KIA operations exists in casualty operations. That is, the use of cell phones and computers in proximity to the battlefield enables many Soldiers to contact his/her home station regarding the casualty. Such communication is unofficial and unacceptable. The next of kin for Soldiers wounded or KIA should not receive notification through unofficial means.

Medical/Personnel Accounting

8-51. When a Soldier becomes a casualty, the platoon combat medic or emergency care sergeant records the medical treatment the Soldier receives on the Soldier's DD Form 1380 (*Tactical Combat Casualty Care (TCCC) Card*). The BAS and Brigade Support Medical Company read the Soldier's DD Form 1380 when they treat the Soldier. The S-1 should electronically receive a notification message to update the Soldier's patient tracking status. In turn, this message should be forwarded to the company. In this manner, a casualty's location can be determined and Soldiers properly accounted for by the company.

Legal Support

8-52. The brigade legal section provides company commanders with legal advice and support across the Army's six core legal disciplines—military justice, international and operational law, administrative and civil law, contract and fiscal law, claims, and legal assistance. The brigade legal section also provides legal assistance services (including Soldier readiness processing) consistent with all applicable laws, regulations, rules of professional responsibility, and the section's level of services. (Refer to FM 1-04 for additional information about brigade legal section support.)

MEDICAL SUPPORT

8-53. The first medical care a Soldier receives occurs at Role 1. Combat medics, assisted by self-aid, buddy aid, and combat lifesavers provide Role 1 services. It continues at the BAS with treatment from the physician and physician assistant.

COMBAT LIFESAVERS

8-54. The combat lifesaver is a nonmedical Soldier trained to perform enhanced first aid and lifesaving procedures beyond the level of self-aid or buddy aid. Although not a health care provider, he is a recipient or consumer of medical materiel. The combat lifesaver assigned to a unit with organic medical support receives normal resupply through the medical platoon. Combat lifesavers assigned to units without organic medical support will be resupplied by the medical element providing area medical support.

8-55. The combat medic can provide emergency resupply to the combat lifesaver. This type of resupply should not be practiced on a routine basis as it presents logistical problems for the combat medic. It should be noted that the combat medic may not carry all of the exact medical items carried by the combat lifesaver.

BATTALION MEDICAL PLATOON

8-56. A medical platoon is organic to each combat battalion headquarters and headquarters company. The platoon is organized with a headquarters section, a treatment squad (two treatment teams), an ambulance squad, and a combat medic section.

8-57. The BAS is under the tactical control of the battalion S-4 and is normally deployed near battalion combat trains. To reduce ambulance turnaround time, the BAS may split and place its treatment teams as close to company teams as tactically feasible. The battalion S-4 closely coordinates locations of the medical elements with the battalion operatins staff officer and the company teams. This is to ensure that the location are known by commanders of maneuvering forces. Coordination ensures that these elements are not placed in the way of friendly maneuvering forces, in line of fires, or in areas subject to be overrun by rapidly advancing enemy forces. Treatment teams situated close to company team that is in contact must be prepared to withdraw to preplanned, alternate positions on short notice.

MEDICAL EVACUATION

8-58. Evacuation of injured Soldiers is categorized into two types—

- Medical evacuation is the use of ground or air ambulances to evacuate from the point of injury to a medical treatment facility while providing en route care.
- CASEVAC is the use of nonmedical vehicles or other means for patient movement without providing en route care.

WARNING

Casualties transported in nonmedical vehicles may not receive proper en route medical care or be transported to the appropriate medical treatment facility to address the patient's medical condition. If the casualty's medical condition deteriorates during transport, or the casualty is not transported to the appropriate medical treatment facility, an adverse impact on his prognosis and long-term disability or death may result.

EVACUATION PROCEDURES

8-59. Vehicle commanders arrange for transport of the casualty to the platoon CCP or the casualty is evacuated to the CCP. From the platoon CCP, the casualty either is transported via CASEVAC to the company CCP, or by the armored ambulance. Depending on METT-TC the casualty may be medically evacuated from the point of injury by air ambulance to the BAS.

Note. Before casualties are evacuated to the collection point or beyond, leaders should remove all key operational items and equipment, including maps, position location devices, and laser pointers. Every unit establishes an SOP for handling the weapons and ammunition of its Soldiers wounded in action.

8-60. At the collection point, the senior combat medic conducts triage of all casualties, takes the necessary steps to stabilize their condition, and initiates the process of moving them to the rear for further treatment. He arranges ground transport or air ambulance. Casualty evacuation requests are initiated on FM voice with a follow-up digital report if possible.

8-61. When air ambulance evacuation is not necessary or when these assets are not available, the team has these options for transporting those wounded in action:

- The senior combat medic can transport casualties to the BAS himself. He turns the WIAs over to the medical team at the BAS, obtains any needed medical supplies, and returns to the company team location.
- The CAB medical platoon's ambulance section can evacuate casualties. Ambulances can be task organized as needed. In many cases, they are habitually associated with the company team. The team's assigned ambulance evacuates WIAs to the BAS, and then returns to the team location.

8-62. Under some operational scenarios, when a treatment team is positioned with a company team's CCP, the attached ambulance may evacuate back to the ambulance exchange point. From the ambulance exchange point, patients are evacuated to the medical treatment facility (MTF) located in the brigade support area (BSA). Soldiers evacuated to the MTF in the BSA receive medical treatment, are returned to duty (RTD), or are evacuated for further treatment. Responsibility for further evacuation from the BAS is the mission of the brigade support medical company ground ambulances or supporting air ambulance.

SECTION II – UNIT COMBAT AND BASIC LOADS

8-63. There are few, if any, contingencies in which U.S. military forces have all the supplies they need for an operation. Because of this, every unit's daily logistical reports must accurately reflect not only its operational needs but what supplies and equipment are on hand.

8-64. As much as possible, logistics planners try to standardize "push" packages, providing all units with sufficient quantities of each supply item in anticipation of their requirements. Together with the commander's guidance for issuance of scarce, but heavily requested, supply items, accurate reporting allows planners to quickly forecast supply constraints and submit requisitions to alleviate projected shortages. Inaccurate or incomplete reporting can severely handicap efforts to balance unit requirements and available supplies. As a

result, some units may go into combat without enough supplies to accomplish their mission while others may have an excess of certain items.

8-65. The company team's combat load includes supplies that it carries into the fight. The CAB commander dictates minimum requirements; however, the company commander or the unit SOP specifies most items. Specific combat loads vary by mission. (Refer to Platform-10 manuals for information on ammunition specific to each platform in support of mission and logistical planning.)

8-66. The basic load includes supplies the company team keeps on its organic support vehicles for combat. The time the company team must sustain itself in combat without resupply determines its quantity of supply items. The higher command or the SOP specifies the Class V basic load.

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Glossary

The glossary lists acronyms and terms with Army or joint definitions. Where Army and joint definitions differ, (Army) precedes the definition. Terms for which ATP 3-90.1 is the proponent are marked with an asterisk. The proponent manual for other terms is listed in parentheses after the definition.

SECTION I – ACRONYMS AND ABBREVIATIONS

1SG	first sergeant
AA	assembly area
ABCT	Armored brigade combat team
ABV	assault breacher vehicle
ACE	armored combat earthmover
AO	area of operations
AT	antitank
ATP	Army techniques publication
AVLB	armored vehicle launched bridge
BAS	battalion aid station
BCT	brigade combat team
BDAR	battle damage assessment and repair
BFSV	Bradley fire support vehicle
BFV	Bradley fighting vehicle
BHL	battle handover line
BP	battle position
CA	civil affairs
CAB	combined arms battalion
CAS	close air support
CASEVAC	casualty evacuation
CBRN	chemical, biological, radiological, and nuclear
CCA	close combat attack
CCIR	commander's critical information requirement
COA	course of action
COIST	company intelligence support team
CP	command post
DS	direct support
EA	engagement area
EW	electronic warfare
FASCAM	family of scatterable mines
FBCB2	Force XXI Battle Command Brigade and Below

FEBA	forward edge of the battle area
FIST	fire support team
FM	field manual
FMT	field maintenance team
FPF	final protective fire
FSC	forward support company
FSO	fire support officer
GEOINT	geospatial intelligence
HN	host nation
HUMINT	human intelligence
IPB	intelligence preparation of the battlefield
IR	infrared
KIA	killed in action
LD	line of departure
LOGPAC	logistics package
LRP	logistics release point
LZ	landing zone
MBA	main battle area
METT-TC	mission, enemy, terrain and weather, troops and support available-time available, and civil considerations
MICLIC	mine clearing line charge
MISO	military information support operations
MOPP	mission-oriented protective posture
MTC	movement to contact
NAI	named area of interest
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NGO	nongovernmental organization
OE	operational environment
OIC	officer in charge
OPORD	operations order
OPSEC	operations security
OSINT	open-source intelligence

PLD	probable line of deployment
PL	platoon leader
POL	petroleum, oils, and lubricants
PSG	platoon sergeant
PZ	pickup zone
RFL	restrictive fire line
ROE	rules of engagement
RTO	radio telephone operator
S-1	battalion or brigade manpower and personnel staff officer
S-2	battalion or brigade intelligence staff officer
S-3	battalion or brigade operations staff officer
S-4	battalion or brigade logistics staff officer
SA	situational awareness
SIGINT	signals intelligence
SITTEMP	situational template
SOP	standard operating procedure
SUSPOTREP	spot report
SU	situational understanding
TLP	troop-leading procedures
TM	technical manual
TOA	transfer of authority
TOW	tube-launched, optically tracked, wire-guided
TRP	target reference point
UAS	unmanned aircraft system
U.S.	United States
WCS	weapon control status
XO	executive officer

SECTION II – TERMS

Actions on Contact
A series of combat actions often conducted simultaneously that are taken on contact with the enemy to develop the situation (ADRP 3-90).

All-Source Intelligence
(DOD) 1. Intelligence products and/or organizations and activities that incorporate all sources of information, most frequently including human intelligence, imagery intelligence, measurement and signature intelligence, and open-source data in the production of finished intelligence. 2. In intelligence collection, a phrase that indicates that in the satisfaction of intelligence requirements, all collection, processing, exploitation, and

reporting systems and resources are identified for possible use and those most capable are tasked. See also intelligence. (JP 2-0)

(Army) The integration of intelligence and information from all relevant sources to analyze situations or conditions that impact operations (ADRP 2-0).

Approach March
The advance of a combat unit when direct contact with the enemy is intended (ADRP 3-90).

Area Defense
A defensive task that concentrates on denying enemy forces access to designated terrain for a specific time rather than destroying the enemy outright (ADRP 3-90).

Area of Interest
(DOD) That area of concern to the commander, including the area of influence, areas adjacent thereto, and extending into enemy territory. This area also includes areas occupied by enemy forces who could jeopardize the accomplishment of the mission. Also called AOI. (JP 3-0) See ADP 3-0, ADRP 3-90, FM 3-90-1, and ATP 3-55.6/MCRP 2-24A/NTTP 3-55.13/AFTTP 3-2.2.

Area Reconnaissance
A form of reconnaissance that focuses on obtaining detailed information about the terrain or enemy activity within a prescribed area (ADRP 3-90).

Area Security
A security task conducted to protect friendly forces, installations, routes, and actions within a specific area (ADRP 3-90).

Assembly Area
(Army) The area a unit occupies to prepare for an operation (FM 3-90-1).

Attack
An offensive task that destroys or defeats enemy forces, seizes and secures terrain, or both (ADRP 3-90).

Battle Handover Line
A designated phase line on the ground where responsibility transitions from the stationary force to the moving force and vice versa (ADRP 3-90).

Battle Position
A defensive location oriented on a likely enemy avenue of approach (ADRP 3-90).

Class I
subsistence

Class II
clothing

Class III
petroleum, oil, and lubricants

Class IV
construction materiel

Class V
ammunition

Class VII
major end items

Class VIII
medical supplies

Class IX
repair parts

Close Combat
Warfare that is carried out on land in a direct-fire fight, supported by direct, and indirect, and other assets (ADRP 3-0).

Combat Formation
An ordered arrangement of forces for a specific purpose and describes the general configuration of a unit on the ground (ADRP 3-90).

Conflict Transformation
The process of converting the actors and conditions that motivate violent conflict into the governmental process to address the causes of instability (FM 3-07).

Cover
A security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body (ADRP 3-90).

Delaying Operation
An operation in which a force under pressure trades space for time by slowing down the enemy's momentum and inflicting maximum damage on the enemy without, in principle, becoming decisively engaged (JP 3-04).

Demonstration
(DOD) In military deception, a show of force in an area where a decision is not sought that is made to deceive an adversary. It is similar to a feint but no actual contact with the adversary. It is similar to a feint but no actual contact with the adversary is intended (JP 3-13.4). See also FM 3-90-1.

Detainee
(DOD) Any person captured, detained, or otherwise under the control of Department of Defense personnel (JP 3-63).

Engagement Area
Where the commander intends to contain and destroy an enemy force with the massed effects of all available weapons and supporting systems (FM 3-90-1). Also called EA.

Exploitation
An offensive task that rapidly follows a successful attack and is designed to disorganize the enemy in depth (ADRP 3-90).

Feint
A feint in military deception is an offensive action involving contact with the adversary conducted for the purpose of deceiving the adversary as to the location and/or time of the actual main offensive action (JP 3-13.4). See also FM 3-90-1.

Fires Warfighting Function
The related tasks and systems that provide collective and coordinated use of Army indirect fires, air and missile defense, and joint fires through the targeting process (ADRP 3-0).

Force Health Protection

(DOD) 1. Measures to promote, improve, or conserve the behavioral and physical well-being of Service members to enable a health and fit force, prevent injury and illness, and protect the force from health hazards. Also called FHP. (JP 4-02)

(Army) 2. Encompasses measures to promote, improve, conserve or restore the mental or physical well-being of Soldiers. These measures enable a healthy and fit force, prevent injury and illness, and protect the force from health hazards. These measures also include the prevention aspects of a number of Army Medical Department functions (preventive medicine, including medial surveillance and occupational and environmental health surveillance; veterinary services, including the food inspection and animal care missions, and the prevention of zoonote disease transmissible to man; combat and operational stress control; dental services (preventive dentistry); and laboratory services [area medical laboratory support]. (FM 4-02)

Geospatial Intelligence
The exploitation and analysis of imagery and geospatial information to describe, assess, and visually depict physical features and geographically referenced activities on the Earth. Geospatial intelligence consists of imagery, imagery intelligence, and geospatial information. Also called GEOINT (JP 2-03). See also ADRP 2-0.

Guard

A security task to protect the main body by fighting to gain time while also observing and reporting information and preventing enemy ground observation of and direct fire against the main body. Units conducting a guard mission cannot operate independently because they rely upon fires and functional and multifunctional support assets of the main body (ADRP 3-90).

Human Intelligence
(DOD) A category of intelligence derived from information collected and provided by human sources (JP 2-0). See ATP 3-05.20.

(Army) The collection by a trained human intelligence collector of foreign information from people and multimedia to identify elements, intentions, composition, strength, dispositions, tactics, equipment, and capabilities (FM 2-0). Also called HUMINT.

Intelligence Analysis
The process by which collected information is evaluated and integrated with existing information to facilitate intelligence production (ADRP 2-0).

Intelligence Operations
The tasks undertaken by military intelligence units and Soldiers to obtain information to satisfy validated requirements (ADRP 2-0).

Intelligence Warfighting Function
The related tasks and systems that facilitate understanding of the enemy, terrain, and civil considerations (ADRP 3-0).

Leadership
The process of influencing people by providing purpose, direction, and motivation to accomplish the mission and improving the organization (ADP 6-22).

Linkup
A meeting of friendly ground forces, which occurs in a variety of circumstances (ADRP 3-90).

Local Security
A security task that includes low-level security activities conducted near a unit to prevent surprise by the enemy (ADRP 3-90).

Main Battle Area
The area where the commander intends to deploy the bulk of the unit's combat power and conduct decisive operations to defeat an attacking enemy (ADRP 3-90).

Main Body
The principal part of a tactical command or formation (ADRP 3-90).

March Column
A march column consists of all elements using the same route for a single movement under control of a single commander (FM3-90-2).

Mission Command

The exercise of authority and direction by the commander using mission orders to enable disciplined initiative within the commander's intent to empower agile and adaptive leaders in the conduct of unified land operations (ADP 6-0).

Mission Command Warfighting Function
The related tasks and systems that develop and integrate those activities enabling a commander to balance the art of command and the science of control in order to integrate the other warfighting functions (ADRP 3-0).

Mobile Defense
A defensive task that concentrates on the destruction or defeat of the enemy through a decisive attack by a striking force (ADRP 3-90).

Movement To Contact
A type of offensive task designed to develop the situation and establish or regain contact (ADRP 3-90).

Passage of Lines
An operation in which a force moves forward or rearward through another force's combat positions with the intent of moving into or out of contact with the enemy (JP 3-18).

Protection Warfighting Function
The related tasks and systems that preserve the force so the commander can apply maximum combat power to accomplish the mission (ADRP 3-0).

Pursuit
An offensive task designed to catch or cut off a hostile force attempting to escape, with the aim of destroying it (ADRP 3-90).

Quartering Party
A group of unit representatives dispatched to a probable new operations site in advance of the main body to secure, reconnoiter, and organize an area before the main body's arrival and occupation (FM 3-90-2).

Raid
An operation to temporarily seize an area in order to secure information, confuse an adversary, capture personnel or equipment, or to destroy a capability culminating in a planned withdrawal (JP 3-0).

Reconnaissance by Fire

A technique in which a unit fires on a suspected enemy position to cause the enemy forces to disclose their presence by movement or return fire (FM 3-90-2).

Reconnaissance in Force

A deliberate combat operation designed to discover or test the enemy's strength, dispositions, and reactions or to obtain other information (ADRP 3-90).

Reconnaissance
A mission undertaken to obtain, by visual observation or other detection methods, information about the activities and resources of an enemy or adversary, or to secure data concerning the meteorological, hydrographic, or geographic characteristics of a particular area. (JP 2-0)

Relief in Place
An operation in which, by the direction of higher authority, all or part of a unit is replaced in an area by the incoming unit and the responsibilities of the replaced elements for the mission and the assigned zone of operations are transferred to the incoming unit (JP 3-07.3).

Reorganization
All measures taken by the commander to maintain unit combat effectiveness or return it to a specified level of combat capability (FM 3-90-1).

Retirement
A form of retrograde in which a force out of contact moves away from the enemy (ADRP 3-90).

Retrograde
A defensive task that involves organized movement away from the enemy (ADRP 3-90).

Route Reconnaissance
A directed effort to obtain detailed information on a specific route and on all terrain from which the enemy can influence movement along that route (ADRP 3-90).

Screen
A security task that primarily provides early warning to the protected force (ADRP 3-90).

Sector of Fire
The area assigned to a unit, a crew-served weapon, or an individual weapon within which it will engage targets as they appear in accordance with established engagement priorities (FM 3-90-1).

Security Operations
Operations undertaken by a commander to provide early and accurate warning of enemy operations, to provide the force being protected with time and maneuver space within which to react to the enemy, and to develop the situation to allow the commander to effectively use the protected force (ADRP 3-90).

Soldier and Leader Engagement
Interpersonal interactions by soldiers and leaders with audiences in an area of operations (FM 3-13).

Spoiling Attack
A tactical maneuver employed to seriously impair a hostile attack while the enemy is in the process of forming or assembling for an attack (FM 3-90-1).

Sustainment Warfighting Function
The related tasks and systems that provide support and services to ensure freedom of action, extend operational reach, and prolong endurance (ADRP 3-0).

Tactical Road March
A rapid movement used to relocate units within an AO to prepare for combat operations (ADRP 3-90).

Target Reference Point
An easily recognizable point on the ground (either natural or man-made) used to initiate, distribute, and controls fires (ADRP 1-02).

Technical Intelligence
(DOD) Intelligence derived from the collection, processing, analysis, and exploitation of data and information pertaining to foreign equipment and materiel for the purposes of preventing technological surprise, assessing foreign scientific and technical capabilities, and developing countermeasures designed to neutralize an adversary's technological advantages (JP 2-0). See ATP 3-05.20.

Tempo
The relative speed and rhythm of military operations over time with respect to the enemy (ADRP 3-0).

Troop Movement
The movement of troops from one place to another is accomplished by any available means (ADRP 3-90).

Unified Action
The synchronization, coordination, and/or integration of the activities of governmental and nongovernmental entities with military operations to achieve unity of effort (JP 1)

Unity of Effort
The coordination and cooperation toward common objectives, even if the participants are not necessarily part of the same command or organization—and is the product of successful unified action (JP 1).

Warfighting Function
A group of tasks and systems (people, organization, information, and processes) united by a common purpose that commanders use to accomplish missions and training objectives (ADRP 3-0).

Withdrawal Operation
A planned retrograde operation in which a force in contact disengages from an enemy force and moves in a direction away from the enemy (JP 3-17)

Zone Reconnaissance
A directed effort to obtain detailed information on all routes, obstacles, terrain, and enemy forces within a zone defined by boundaries (ADRP 3-90).

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27 January 2016

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